Projects in Final Design

MARC Penn-Camden Connection

Baltimore, Maryland

(November 2002)

Description

The Maryland Transit Administration (MTA) has proposed construction of a six-mile rail line to connect two of the Maryland Commuter Rail (MARC) lines, the Camden and Penn Lines, in southwest Baltimore. The Penn Line also serves the Amtrak Northeast Corridor. The Penn-Camden Connection will provide many operational benefits to the MARC system. These include: the opportunity to remove trains from the congested Camden line for reverse peak movements; access to the planned MARC maintenance facility to be located along the connection; and increased operating flexibility on both commuter rail lines, allowing redirection of MARC service during periods of CSX freight operations.

The Penn-Camden Connection is one of four MARC system improvements being undertaken by MTA. The project is estimated to cost $30.8 million in escalated dollars, with a proposed Section 5309 New Starts share of $12.4 million. Because the proposed New Starts share is less than $25 million, the project is exempt from the New Starts criteria, and is thus not subject to FTA's evaluation and rating (49 USC 5309(e)(8)(A)).

Summary Description	
Proposed Project:	Commuter Rail Improvement
Total Capital Cost ($YOE):	$30.8 Million
Section 5309 New Starts Share ($YOE):	$12.4 Million (40%)
Annual Operating Cost:	N/A

Status

FTA issued a Finding of No Significant Impact in October 1999. The project is currently in Final Design.

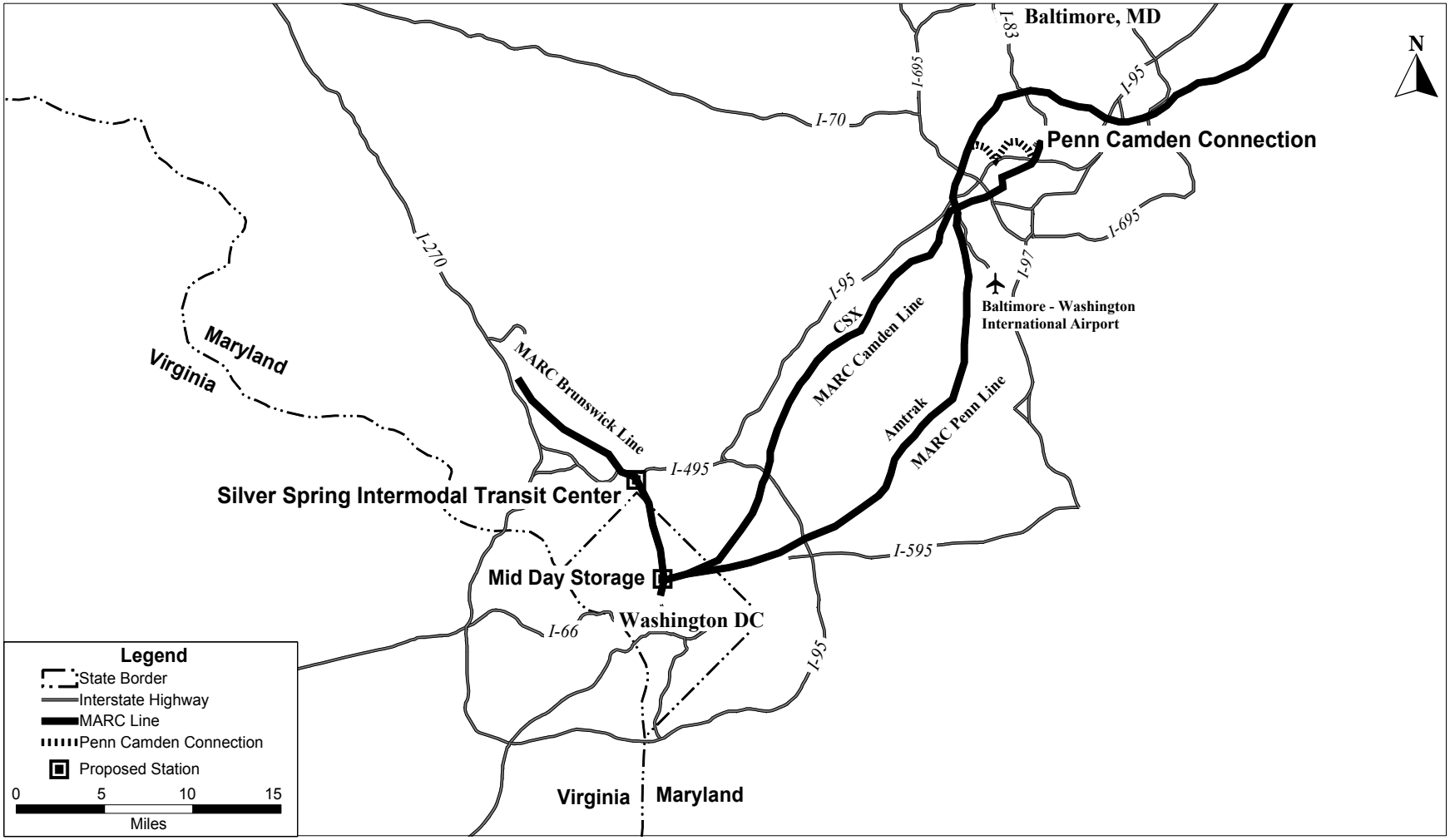
TEA-21 Section 3030(a)(41) authorizes the "MARC – Commuter Rail Improvements" for Final Design and Construction. Through FY 2002, Congress has appropriated $0.8 million in Section 5309 New Starts funds for this effort.

Locally Proposed Financial Plan		
Proposed Source of Funds	**Total Funding (million)**	**Percent of Total**
Federal: Section 5309 New Starts	$ 12.4	40.3 %
State: Transportation Trust Fund	$ 18.4	59.7 %
Total:	**$ 30.8**	100.0 %

NOTE: Funding proposal reflects assumptions made by project sponsors, and are not DOT or FTA assumptions. Total may not add due to rounding.

MARC Penn-Camden Connection

Baltimore, Maryland



Federal Transit Administration, 2002

Ravenswood Expansion Project

Chicago, Illinois
(November 2002)

Description

The Chicago Transit Authority (CTA) is proposing to reconstruct existing platforms and stations on the existing Ravenswood (Brown) Line to accommodate eight-car trains, along with other related capital improvements. The Ravenswood Line extends approximately 9.3 miles from the Kimball Terminal on the north side of Chicago through the "Loop Elevated" in downtown Chicago and includes 19 stations. The majority of the line operates on an existing elevated structure (8.1 miles), except for a portion near the northern end of the line, which operates at-grade (1.2 miles). The line was originally constructed in the late 1800s and early 1900s and currently operates through several densely developed Chicago neighborhoods. CTA reports that Brown Line stations currently experience persistent overcrowding conditions. Current station and platform size prohibit the CTA from increasing capacity to handle increasing demand.

The proposed project includes the modernization of stations and other rail infrastructure improvements, including compliance with the Americans with Disabilities Act (ADA) regulations for improved station accessibility, resulting in an enhancement of passenger safety and convenience. CTA would also upgrade several highway grade crossings to reduce inconvenience to vehicular traffic and improve pedestrian safety along the line. CTA also expects that the modernization of the Brown Line's signal/communication controls would improve train performance and reliability by optimizing operations along the line via a reduction or elimination of current "slow zones" of, in some areas, less than 15 miles per hour due to the line's deterioration. CTA anticipates that the improvements would facilitate the capability to reach 35 mph and reduce passenger waiting times at Brown Line stations. Current headways along the line average approximately 3.8 minutes. These improvements are anticipated to result in travel time savings of approximately 13.8 percent (four minute decrease in travel time from Kimball to "the Loop" in downtown Chicago) and a 33 percent increase in the line's capacity.

Summary Description	
Proposed Project:	Heavy Rail Expansion; Related Improv. 9.3 Miles, 19 Stations
Total Capital Cost ($YOE):	$529.9 Million
Section 5309 New Starts Share ($YOE):	$245.5 Million (46%)
Annual Operating Cost (2020 $YOE):	$1.2 Million (Incremental Cost)
Ridership Forecast (2020):	68,000 Average Weekday Boardings 12,300 Daily New Riders
Opening Year Ridership Forecast (2009):	55,700 Average Weekday Boardings
FY 2004 Finance Rating:	**Medium**
FY 2004 Project Justification Rating:	**Not Rated**
FY 2004 Overall Project Rating:	**Not Rated**

The ***Not Rated*** rating was assigned since FTA and the project sponsor were unable to successfully implement the software necessary to calculate the user benefit information for this project. However, FTA and the project sponsor have calculated an estimate of user benefits, which we believe to be reasonable and which would result in a "Recommended" rating for the project. FTA will continue to work with the project sponsor to implement the software and confirm this estimate. The overall project rating applies to this *Annual Report on New Starts* **and reflects conditions as of November 2002.** Project evaluation is an ongoing process. As New Starts projects proceed through development, the estimates of costs, benefits, schedules and impacts are refined. **The FTA's ratings and recommendations will be updated annually to reflect new information, changing conditions and refined financing plans.**

Status

In November 1997, the Chicago Area Transportation Study – the local Metropolitan Planning Organization – included the Ravenswood Expansion Project in the region's financially constrained long range transportation plan. FTA approved the project into Preliminary Engineering in early 2000. In February 2002, CTA completed an Environmental Assessment. FTA issued a Finding of No Significant Impact on the project in July 2002. FTA approved the project into Final Design in August 2002. CTA anticipates that Final Design will be completed in April 2003.

TEA-21 Section 3030(a)(11) authorizes the "Ravenswood Line Extension [CTA]" for Final Design and construction. Through FY 2002, Congress has appropriated $7.89 million in Section 5309 New Starts funds for the project.

Evaluation

The following criteria have been estimated in conformance with FTA's *Reporting Instructions for the Section 5309 New Starts Criteria*, updated in June 2002. The project will be reevaluated for next year's *Annual Report on New Starts*.

Project Justification Quantitative Criteria		
Mobility Improvements Rating: Not Rated		
	New Start vs. Baseline	
Average Employment Per Station	4,229	
Average Low Income Households Per Station	608	
Transportation System User Benefit Per Project Passenger Mile (Minutes)	Not Rated	
Environmental Benefits Rating: High		
Criteria Pollutant Reduced (tons)	**New Start vs. Baseline**	
Carbon Monoxide (CO)	70	
Nitrogen Oxide (NO_x)	1,380	
Hydrocarbons	120	
Particulate Matter (PM_{10})	160	
Carbon Dioxide (CO_2)	18,910	
Annual Energy Savings (million) BTU	235,320	
Cost Effectiveness Rating: Not Rated		
	New Start vs. Baseline	
Cost per Transportation System User Benefit (current year dollars/hour)	Not Rated	
Operating Efficiencies Rating: Medium		
	Baseline	**New Start**
System Operating Cost per Passenger Mile (current year dollars)	$0.16	$0.16

Project Justification

Rating: Not Rated

This project was assigned a ***Not Rated*** since FTA and the project sponsor were unable to successfully implement the software necessary to calculate the user benefit information for this project. However, FTA and the project sponsor have calculated an estimate of user benefits, which we believe is reasonable and would result in an overall rating of "Recommended" for the project. FTA will continue to work with the project sponsor to implement the software and confirm this estimate. Based on 1990 Census data, CTA estimates that there are 11,551 low-income households within a ½-mile radius of the proposed 19 stations that would be reconstructed as part of the Ravenswood Expansion Project. This represents approximately 13 percent of the total number of households within a ½-mile radius of the proposed project. CTA also estimates that the project would serve approximately 80,000 jobs that are located within a ½-mile radius of station areas. The Chicago metropolitan area is classified as a "severe non-attainment area" for ozone. The region is an "attainment area" for carbon monoxide and

particulate matter. CTA estimates that the project has an incremental cost per incremental trip value of $5.00.

Existing Land Use, Transit-Supportive Land Use Policies and Future Patterns Rating: High

The *High* rating reflects high population and employment levels and the strong transit-accessible environment that characterizes the Ravenswood Corridor and the Chicago central business district (CBD).

Existing Conditions: The Ravenswood Line has been in operation for nearly 100 years and serves neighborhoods that originally developed around the transit system. The corridor contains an estimated 89,000 jobs and 194,000 residents within a ½-mile radius of stations (not including the CBD). Population densities are very high, averaging 24,900 persons per square mile. Current employment density within the corridor is estimated at 11,400 jobs per square mile. The line serves a dense CBD with an estimated 339,000 jobs. Other major trip generators in the corridor include DePaul University (18,000 students) and three major hospitals. Existing development along the entire line is highly urban in character. Mixed commercial, retail, and residential development on arterials – generally two-to-four stories in height in the inner portion of the corridor – is surrounded by dense residential neighborhoods characterized by multi-family and densely packed single-family housing. The inner stations along the Ravenswood Line also serve several high-rise apartment buildings and specialty retail districts. Existing Chicago zoning ordinances permit transit-supportive commercial and residential densities in the corridor. Consequently, new development and infill development conforms to the scale of existing development and transit-supportive land use design principles.

Future Plans, Policies and Performance: In the year 2020, total population and employment within the Ravenswood Corridor is projected to increase approximately ten percent (214,000) and eight percent (95,700), respectively. CTA, along with the State of Illinois, is engaged in the promotion and support of transit-oriented land use development principles and activities as well as regional growth management strategies. The City of Chicago also has a number of policies and programs in place to support redevelopment and transit-supportive land use development. The City has designated a number of tax increment financing (TIF) districts to finance improvements in dilapidated areas and stimulate reinvestment. There are a number of TIF districts in proximity to existing Ravenswood Line stations. In addition, the City has created an Industrial Corridors Program to plan and implement improvements to Chicago's 22 industrial corridors to increase the area's competitiveness. One of these corridors is adjacent to three existing Ravenswood Line stations. The Metropolitan Planning Council, a non-profit, non-partisan group of business and civic leaders, including the Chicagoland Chamber of Commerce and Business Leaders for Transportation, is leading a "Campaign for Sensible Growth" to promote economic development and community development in established neighborhoods.

Other Factors

The City of Chicago has aggressive parking policies in place to support transit in the Ravenswood Corridor. Current zoning allows higher densities with reduced parking requirements in relation to transit facilities. In addition, the Chicago zoning code provides

bonuses in the form of reduced parking requirements and increased floor area ratios for direct connections to transit, open space, setbacks and arcades.

Local Financial Commitment
Rating: Medium

The *Medium* local financial commitment rating was determined by the *Medium* rating for the capital financing plan.

Proposed Non-Section 5309 New Starts Share of Total Project Costs: 54%
Rating: Medium

The financial plan for the Ravenswood Expansion Project includes Section 5309 New Starts funds, Section 5307 Urbanized Area Formula funds, Illinois DOT bonds, and bonds from the Regional Transportation Authority (RTA) of Northeastern Illinois and the CTA.

Locally Proposed Financial Plan

Proposed Source of Funds	Total Funding ($million)	Percent of Total
Federal:		
Section 5309 New Starts	$245.5	46.3 %
Section 5307 Urbanized Area Formula	$177.6	33.5 %
State:		
Illinois DOT	$49.7	9.4 %
Local:		
RTA/CTA bonds	$57.0	10.8 %
Total:	**$529.9**	100.0 %

NOTE: Funding proposal reflects assumptions made by project sponsors, and are not DOT or FTA assumptions. Total may not add due to rounding.

Stability and Reliability of Capital Financing Plan
Rating: Medium

The *Medium* rating acknowledges the stability of the non-Section 5309 New Starts sources that are reflected in the financial plan for the Ravenswood Expansion Project – Illinois DOT bonds, Strategic Capital Improvement Program bonds – including historical trends of receiving financial support from the sales tax revenues that CTA levies in the agency's service area (Cook County).

Agency Capital Financial Condition: CTA's financial condition is sound. The average age of the agency's bus fleet is 8.7 years. As a result of an aggressive vehicle replacement schedule, the percentage of buses over 12 years old has been reduced from 29 percent in 1998 to 17 percent currently. CTA is also undergoing a major recapitalization program of the agency's rail fleet.

Capital Cost Estimate and Contingencies: The proposed project's total capital cost estimate increased approximately 11 percent from last year's *Annual Report on New Starts*. The current estimate includes project management, construction, signals/communications equipment, real estate acquisition, and financing charges. The current total capital cost estimate also includes a 9.5 percent [project-wide] contingency, which is sufficient for this stage of project development.

Existing and Committed Funding: All non-Section 5309 New Starts funds are from existing sources and are considered reasonably committed. The Illinois DOT, RTA and the CTA are scheduled to contribute a total of $106.7 million to cover approximately 10.6 percent of the non-Section 5309 New Starts share of the project's total estimated capital cost. These funds would be provided by the Illinois FIRST (Funding for Infrastructure, Roads, Schools and Transportation) program and local bond revenues.

New and Proposed Sources: No new sources of capital funding are proposed for the reconstruction of the Ravenswood Line.

Stability and Reliability of Operating Finance Plan
Rating: Medium-High

The *Medium-High* rating acknowledges CTA's healthy operating condition. Anticipated revenues (sales taxes and Illinois public transportation funds) to operate the proposed project are considered stable and sufficient.

Agency Operating Financial Condition: CTA is operating within a solid financial framework. Since 1997, annual ridership on CTA's bus and rail lines has increased approximately 7.5 percent. CTA's FY 2002 [system-wide] operating budget is estimated at $914.8 million – a 5.3 percent increase over the FY 2001 operating budget. Of this amount, approximately 35 percent ($326 million) is anticipated for the agency's rail operations. The agency's system-generated revenues increased from $402 million in 1996 to $473 million in 2002, an increase of 18 percent. By the year 2021, system-generated revenue is projected to grow annually to $732 million (55 percent increase from the year 2002). CTA's annual budget is anticipated to increase to $1.2 billion by the year 2008, while growing to approximately $1.4 billion in the year 2021.

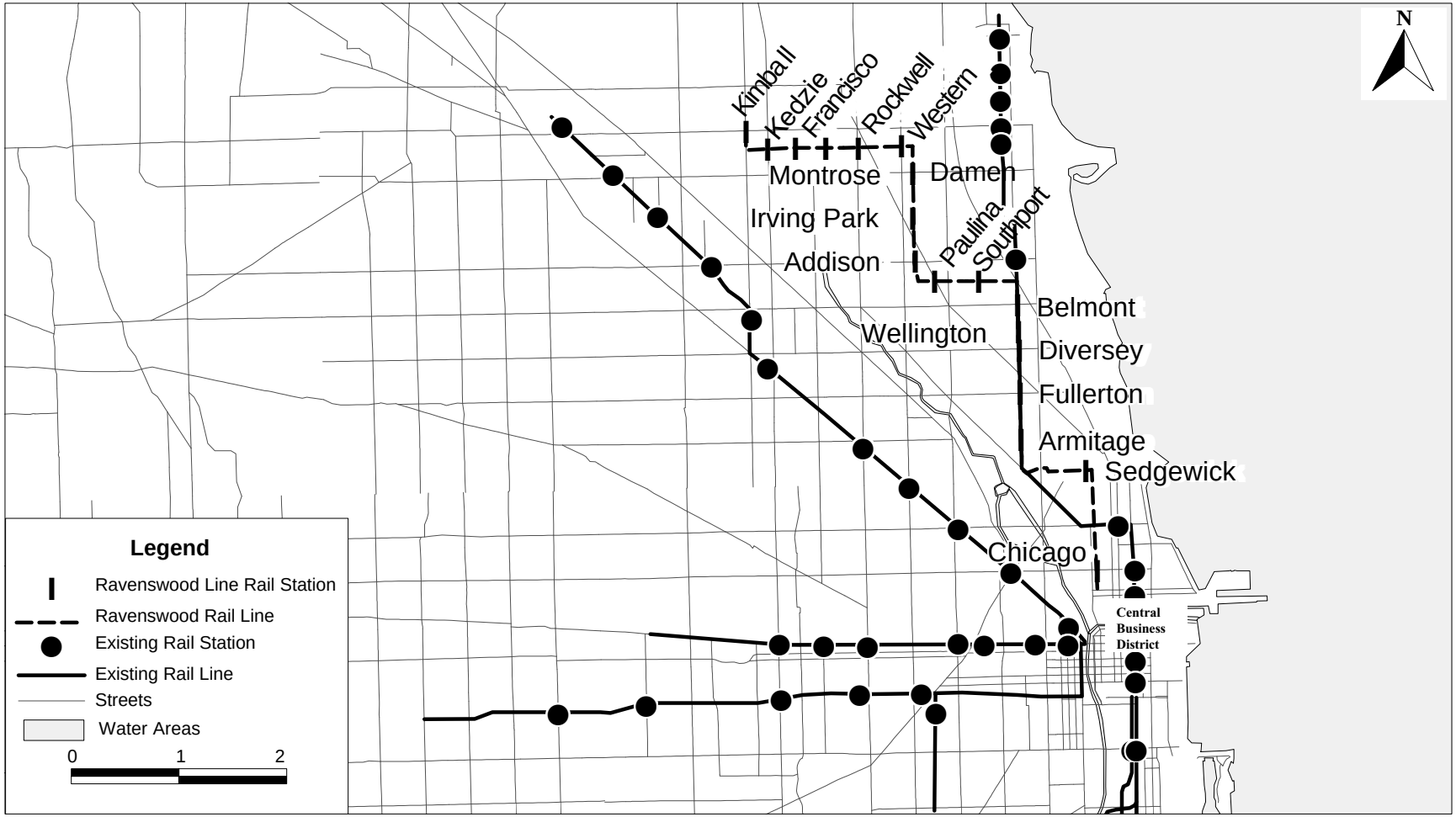
Operating Cost Estimates and Contingencies: Annual incremental operating and maintenance costs for the Ravenswood Expansion Project are estimated by CTA at $1.2 million (escalated dollars) and are anticipated to increase annually at a rate of two-to-three percent according to the agency's 20-year cash flow analysis. The proposed project would be integrated into CTA's overall rail operations plan. According to the agency's rail fleet management plan, the current Ravenswood Line accounts for approximately $38 million to $46 million of the agency's overall rail operating budget. Following the completion of the Ravenswood Expansion Project, CTA's projected incremental operating and maintenance costs for the Brown Line would be reasonable, in comparison to the agency's system-wide operating expenses.

Existing and Committed Funding: All proposed sources of operating funds (sales taxes, fares, etc.) are existing and committed.

New and Proposed Funding Sources: No new sources of revenue are proposed for the operations of the Ravenswood Expansion Project.

Ravenswood Expansion Project

Chicago, Illinois



Federal Transit Administration, 2002

Euclid Corridor Transportation Project

Cleveland, Ohio
(November 2002)

Description

The Greater Cleveland Regional Transit Authority (GCRTA) is proposing to implement a 9.8-mile bus rapid transit (BRT) system that would incorporate exclusive BRT lanes and related capital improvements on Euclid Avenue from Public Square in the Cleveland central business district (CBD) east to University Circle. The Euclid Corridor Transportation Project (ECTP) also includes the construction of an intermodal transit center at the eastern portion of the corridor, improvements to East 17th/East 18th Streets, and a "transit zone" on St. Clair and Superior Avenues utilizing exclusive BRT lanes. GCRTA is also planning to procure twenty 60-foot articulated hybrid-electric buses with left-hand and right-hand side doors for access and egress of patrons in the corridor. The ECTP vehicles would have access to the entire Euclid Avenue Corridor. Conventional buses would primarily operate outside of the Cleveland CBD. The proposed BRT system would provide rapid transit service to the University Circle area and continue to the City of East Cleveland and terminate at the existing Louis Stokes/Windermere rapid transit station. Increased intermodal access between the proposed BRT and two existing rail rapid transit stations (Tower City in downtown Cleveland and Louis Stokes at University Circle), along with the construction of two transit centers, only one of which (the Eastside Transit Center) would be funded with Section 5309 New Starts funds, would also be achieved.

GCRTA anticipates that with the implementation of exclusive BRT lanes, signal prioritization and pedestrian zone improvements along Euclid Avenue, the ECTP would improve transit ridership between the region's two largest employment centers: Cleveland's CBD and University Circle. Implementation of the ECTP is also anticipated to result in a 20 percent decrease (eight minute reduction) in travel time along Euclid Avenue – GCRTA's most heavily utilized bus route that operates between the region's two main employment centers. GCRTA also expects that improvements to East 17th/East 18th Streets would enhance cross-town bus circulation in the Cleveland CBD and allow the streets to function as north/south arterials.

Summary Description	
Proposed Project:	Bus Rapid Transit Line 9.8 Miles, 30 Stations
Total Capital Cost ($YOE):	$245.7 Million
Section 5309 New Starts Share ($YOE):	$122.8 Million (50%)
Annual Operating Cost (2020 $YOE):	$1.2 Million
Ridership Forecast (2025):	29,500 Average Weekday Boardings 2,400 Daily New Riders
Opening Year Ridership Forecast (2006):	30,500 Average Weekday Boardings
FY 2004 Finance Rating:	**Medium**
FY 2004 Project Justification Rating:	**Medium**
FY 2004 Overall Project Rating:	**Recommended**

The *Recommended* rating is primarily based on the strength of the transit-supportive land use elements of the Euclid Avenue Corridor and the sufficiency of the project's financial plan. The overall project rating applies to this *Annual Report on New Starts* **and reflects conditions as of November 2002.** Project evaluation is an ongoing process. As New Starts projects proceed through development, the estimates of costs, benefits, schedules and impacts are refined. **The FTA's ratings and recommendations will be updated annually to reflect new information, changing conditions and refined financing plans.**

Status

In November 1995, the GCRTA Board of Trustees selected the ECTP as the Locally Preferred Alternative (LPA). The LPA included the construction of a busway along Euclid Avenue and the rehabilitation and relocation of several existing rail rapid transit stations. In December 1995, the Northeast Ohio Areawide Coordinating Agency – the local Metropolitan Planning Organization – adopted a resolution supporting the ECTP. FTA approved GCRTA's request to initiate Preliminary Engineering on the ECTP in September 1996. In 1999, GCRTA reconfigured the scope of the ECTP to incorporate only the construction of a busway along Euclid Avenue. The rapid rail elements were eliminated from the ECTP proposal for Section 5309 New Starts funding. GCRTA completed the environmental review process for the ECTP in September 2001 with FTA's issuance of a Finding of No Significant Impact. FTA approved the ECTP into Final Design in July 2002. In October 2002, GCRTA reconfigured the scope of the ECTP to include the construction of the Eastside Transit Center (ESTC), located at University Circle. The ESTC would function as a hub for bus traffic serving the campus of Cleveland State University and the rest of downtown Cleveland. The ESTC would also link other GCRTA services facilitating convenient transfers between bus lines and eliminating on-street bus layovers.

Section 3030(a)(17) of TEA-21 authorized the "Euclid Corridor Extension" for Final Design and construction. Through FY 2002, Congress has appropriated $19.38 million in Section 5309 New Starts funds for the ECTP. Of this amount, Congress reprogrammed $4.72 million to other projects.

Evaluation

The following criteria have been estimated in conformance with FTA's *Reporting Instructions for the Section 5309 New Starts Criteria*, updated in June 2002. The project will be reevaluated in the next *Annual Report on New Starts*.

Project Justification Quantitative Criteria		
Mobility Improvements Rating: Low-Medium		
	New Start vs. Baseline	
Average Employment Per Station	5,911	
Average Low Income Households Per Station	367	
Transportation System User Benefit Per Project Passenger Mile (Minutes)	1.0	
Environmental Benefits Rating: Medium-High		
Criteria Pollutant Reduced (tons)	**New Start vs. Baseline**	
Carbon Monoxide (CO)	70	
Nitrogen Oxide (NO_x)	502	
Hydrocarbons	0.2	
Particulate Matter (PM_{10})	[1]	
Carbon Dioxide (CO_2)	5,720	
Annual Energy Savings (million) BTU	74,800	
Cost Effectiveness Rating: Low		
	New Start vs. Baseline	
Cost per Transportation System User Benefit (current year dollars/hour)	$35.40	
Operating Efficiencies Rating: Medium		
	Baseline	**New Start**
System Operating Cost per Passenger Mile (current year dollars)	$0.73	$0.73

[ ] indicate an increase in emissions.

Project Justification
Rating: Medium

The *Medium* project justification rating is based on the strong transit-supportive land use environment of the Euclid Avenue Corridor, the number of low-income households served, and the corridor's employment market. With the continued improvement in FTA's project evaluation process, including the introduction of the transportation system user benefit measure, the value of proposed transit projects can be more accurately assessed. Accordingly, FTA intends to put additional emphasis on the cost-effectiveness measure. This year, this project has received a "low" rating for cost-effectiveness, which raises concerns about the merits of the project for Federal funding. FTA strongly encourages sponsors to improve the cost-effectiveness of the project.

Based on 2000 Census data, GCRTA estimates that there are a total of 16,892 low-income households located within a ½-mile radius of proposed ECTP station areas. This represents approximately 73 percent of the total households within a ½-mile radius of the proposed project. GCRTA also estimates that the ECTP would serve approximately 195,350 jobs that are located within a ½-mile radius of proposed station areas. The City of Cleveland is classified as a "maintenance area" for ozone and a "moderate non-attainment area" for particulate matter. GCRTA estimates that the ECTP has an incremental cost per incremental trip value of $34.03.

Existing Land Use, Transit-Supportive Land Use Policies and Future Patterns Rating: Medium-High

The *Medium-High* land use rating reflects the strong existing land use and high trip generators in the Euclid Avenue Corridor, as well as the transit-supportive land use policies within the Cleveland central business district (CBD) and much of the remainder of the corridor.

Existing Conditions: The downtown area adjacent to Euclid Avenue includes high-density commercial uses (office and retail), a theater district, the campus of Cleveland State University, and a professional sports complex. Several institutional and cultural uses are located in the University Circle area, including Case Western Reserve University, the Cleveland Clinic Foundation, and four museums. The Midtown area, located between the CBD and University Circle, is characterized by underutilized commercial and industrial land. Multi-family and single-family housing on a grid street pattern is located one to two blocks away from Euclid Avenue throughout most of the corridor. In 1995, total employment in the Cleveland CBD was approximately 122,000, while total employment in the corridor as a whole (a ½-mile radius of the 9.8-mile busway project) was estimated at 207,000. Total corridor population was estimated at 41,000, at an average density of 7,400 persons per square mile. Evidence of a reversal of previous declining population and employment trends is supported by recent increases in residential development in the Cleveland CBD and two corridor neighborhoods, and by commercial redevelopment in the Midtown area.

Future Plans, Policies and Performance: A wide range of City, small area, and institutional plans have been developed that focus on promoting redevelopment and on creating a more pedestrian-friendly, transit-oriented environment in the CBD and the Euclid Avenue Corridor. The City of Cleveland, including the Midtown area, also has a strong network of local development corporations and business organizations that act in partnership with the public sector in promoting redevelopment. Zoning in the Midtown area is anticipated to be revised to convert industrial areas to office uses and to allow mixed-use activities, and a pedestrian retail overlay district has been adopted that could be applied to portions of the corridor. Conceptual plans have been developed for some neighborhoods, with demonstrated examples of redevelopment activities consistent with these plans. Institutional plans also stress creating a more pedestrian-friendly environment and increasing institutional-related development in specific areas. Planning activities specific to the Euclid Corridor Transportation Project have also been undertaken. These include an economic development plan for the corridor, street design guidelines, and Transit-Supportive Principles and Development Guidelines that specify guidelines for transit-supportive building design and placement. GCRTA and the City of Cleveland have been working with local institutions and business groups to raise awareness of

transit-oriented design principles and specifically to incorporate these principles into development along Euclid Avenue. At a regional level, some recent efforts are being demonstrated to support reinvestment in fully developed communities and existing infrastructure.

Other Factors

Potential Redevelopment Near ECTP Station Areas: The ECTP Economic Development Plan (September 2001) projects that the proposed ECTP Busway could yield approximately 9.2 million square feet of commercial development and 7,700 residential units (15,500 people) in the year 2025, including the downtown Cleveland area. These figures include an additional 6.2 million square feet and 5,350 residential units that could occur in conjunction with the proposed busway and transit-supportive land use policies. These projections reflect a capture rate of 16 percent of regional commercial development and 12 percent of regional residential construction in the Euclid Avenue Corridor by the forecast year 2025.

Local Financial Commitment
Rating: Medium

The *Medium* local financial commitment rating was determined by the *Medium* rating for the capital financing plan and the *Medium* rating for the operating financing plan.

Proposed Non-Section 5309 New Starts Share of Total Project Costs: 50%
Rating: Medium

The financial plan for the Cleveland – Euclid Corridor Transportation Project includes Section 5309 New Starts funds, State Flexible Funds, GCRTA revenues, City of Cleveland appropriations and CMAQ funds from the Northeast Ohio Areawide Coordinating Agency (NOACA).

Locally Proposed Financial Plan		
Proposed Source of Funds	**Total Funding ($million)**	**Percent of Total**
Federal: Section 5309 New Starts	$122.8	50.0 %
State: Flexible Funds: State of Ohio – TRAC Program*	$59.0	24.0 %
Local: GCRTA City of Cleveland NOACA	 $35.8 $18.0 $10.0	 14.6 % 7.3 % 4.1 %
Total:	**$245.7**	100.0 %

NOTE: Funding proposal reflects assumptions made by project sponsors, and are not DOT or FTA assumptions. Total may not add due to rounding.

* The State of Ohio, through the Transportation Review Advisory Council (TRAC), has committed Federal Flexible funds (CMAQ or STP) to the ECTP. These will be 100 percent Federal funds that will be matched by toll credits from the Ohio Department of Transportation. Section 1111(j) of TEA-21 (formerly Section 1044 of ISTEA) permits states to earn credits on toll revenue expenditures and for states to apply these credits as match toward the non-Federal matching share requirement for Federal-aid projects.

Stability and Reliability of Capital Financing Plan
Rating: Medium

The *Medium* rating reflects the commitment of the non-Section 5309 New Starts share of the ECTP's total estimated capital costs, including commitments from the Ohio Department of Transportation and NOACA. However, the rating also reflects FTA's determination that GCRTA should ensure that sufficient contingencies exist to cover any unanticipated cost overruns.

Agency Capital Financial Condition: GCRTA's financial condition is sound, reflecting the agency's stewardship of Federal, State and local funds. The agency is currently replacing its bus fleet. Bus replacement is scheduled for completion at the end of 2002. When completed, the average age of GCRTA's bus fleet will be reduced from 8.8 years to 6.4 years. The average age of the agency's heavy rail and light rail fleet is approximately 16 years, and 18 years, respectively. GCRTA's bonds have received upper grade ratings of 'AAA' by Fitch and 'Aaa' by Moody's Investors, Inc. However, GCRTA's continuing ability to apply sales tax revenue to the agency's capital projects will depend on the agency's ability to maintain a positive operating balance, since growth in sales taxes is projected to slow compared to rates experienced in previous years. In addition, while GCRTA's ability to issue General Obligation bonds is

constrained by several [locally-mandated] statutory ceilings, a substantial margin remains for borrowing before these limits are reached.

Capital Cost Estimate and Contingencies: The total estimated capital cost for the ECTP increased approximately nine percent from the estimate reported in last year's *Annual Report on New Starts*. This is a result of GCRTA's inclusion of the construction of the Eastside Transit Center (ESTC) in the scope of the ECTP proposal for Section 5309 New Starts funds. At this time, the total estimated capital cost for the ECTP is reasonable at this stage of project development. However, as noted previously, the current total capital cost estimate entails a degree of uncertainty and will be closely monitored by GCRTA for any potential cost saving measures that could be undertaken to keep estimates, including contingencies for the ESTC, within GCRTA's overall budget for the ECTP. In addition, GCRTA will reevaluate the capital cost estimates and contingencies associated with the ESTC and the modification of basement area vaults that are located along Euclid Avenue for accuracy and to ensure that the estimates remain within the overall budget for the ECTP.

Existing and Committed Funding: At this time, approximately 85 percent ($104.8 million) of the total non-Section 5309 New Starts share of the project's total estimated capital cost has been committed to the ECTP by the Ohio Department of Transportation, GCRTA and NOACA. The remaining 15 percent ($18 million) consists of local funds from the City of Cleveland. The City and GCRTA are scheduled to execute a revised Interagency Agreement regarding the City's contribution to the project in February 2003. In October 2002, NOACA formally committed $10 million for the construction of the ECTP. These monies will be provided from the region's allocation of Congestion Mitigation and Air Quality (CMAQ) funds.

New and Proposed Sources: No new capital funding sources are proposed for the construction of the ECTP.

Stability and Reliability of Operating Finance Plan
Rating: Medium

The *Medium* rating reflects the stable operating condition of GCRTA. Revenues to operate the proposed ECTP are sufficient.

Agency Operating Financial Condition: GCRTA's operating condition is sound. In 2001, GCRTA provided approximately 60 million passenger trips systemwide. GCRTA's 20-year cash flow analysis incorporates a reduced rate of sales tax increase for 2000-2001, but the pace of sales tax revenue growth is projected to rise again in future years, primarily due to the economic development (residential and commercial) that are anticipated along the Euclid Avenue Corridor, resulting in reasonable agency-wide financial conditions.

Operating Cost Estimates and Contingencies: Annual operating and maintenance costs for the ECTP are estimated at $1.2 million (escalated dollars). These estimates do not include operating expenses associated with Euclid Avenue right-of-way maintenance ($0.4 million) or the intermodal transit centers ($0.07 million). These estimates are considered reasonable. GCRTA currently operates a significant level of bus service within the Euclid Avenue Corridor – the

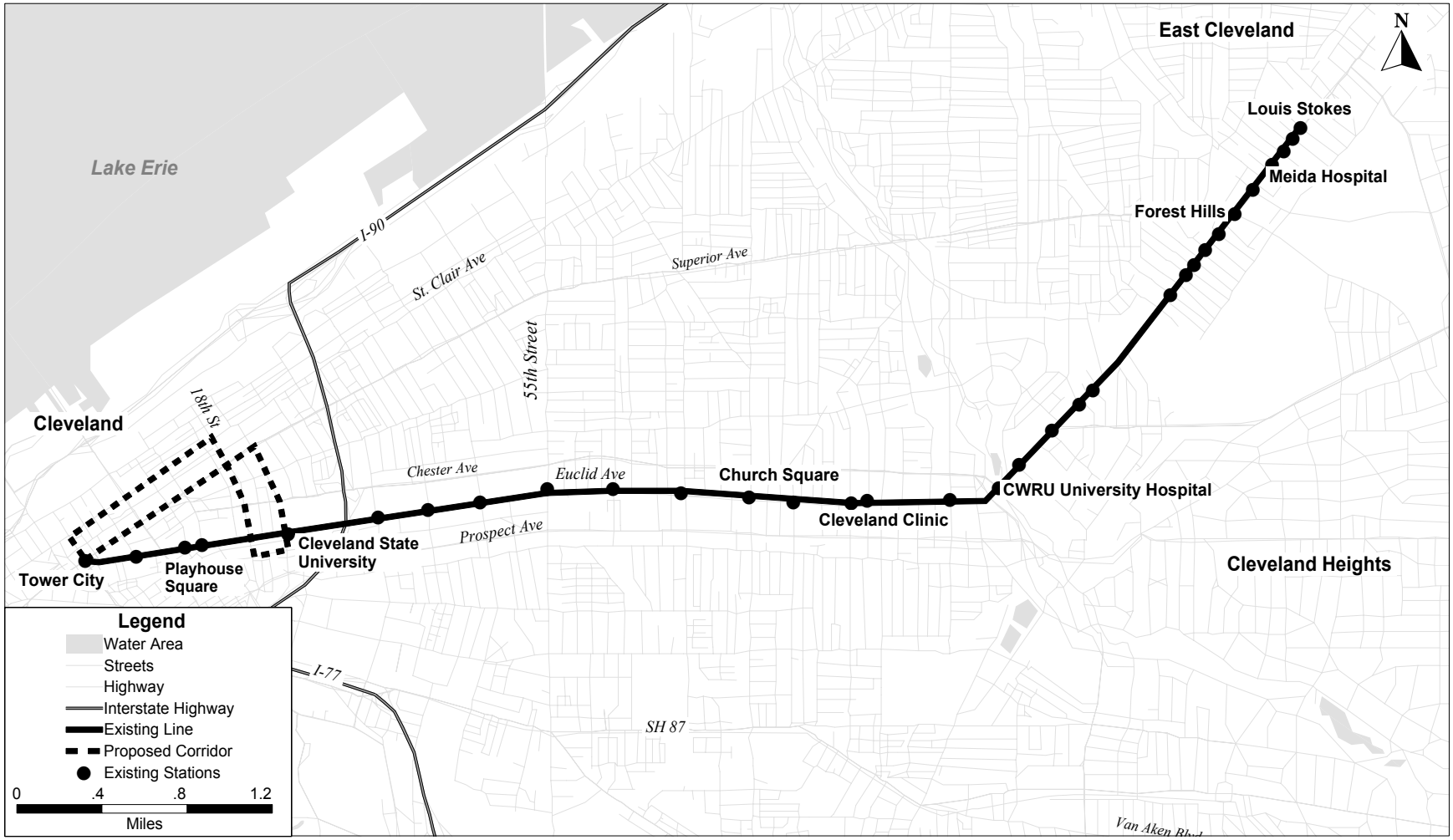
agency's most heavily utilized bus route. GCRTA anticipates that, with the implementation of the proposed ECTP, the agency would realize significant operational savings by reducing annual operating and maintenance costs associated with conventional buses that currently operate along Euclid Avenue.

Existing and Committed Funding: All proposed sources for operating funds exist. Incremental operating costs are anticipated to be modest. In addition, GCRTA's projections indicate that increases in passenger fares and sales tax revenue resulting from the commencement of service on the ECTP are expected to meet the majority, if not all, of the additional operating costs associated with the ECTP. However, GCRTA did not document the underlying assumptions of the operating revenue sources included in the plan that are anticipated to cover the ECTP's projected operating expenses.

New and Proposed Funding Sources: No new sources of operating funds are proposed for the Euclid Corridor Transportation Project.

Euclid Corridor Transportation Project

Cleveland, Ohio



Federal Transit Administration, 2002

Rail Trolley Extension

Galveston, Texas

(November 2002)

Description

The City of Galveston, Texas, through its transit operator Island Transit, has proposed a 1.5-mile extension of the existing fixed rail trolley from downtown to the University of Texas Medical Branch (UTMB) and farther to Stewart Beach on the Gulf of Mexico. The City has identified two phases for construction purposes. The first phase is a 0.80-mile Minimum Operable Segment (MOS) that is a single-track extension with passing track. Phase 2, 0.69 miles in length, completes the extension to Stewart Beach. The proposal incorporates transit-oriented pedestrian and Americans with Disabilities Act improvements to Magnolia Homes, a public housing project for low-income persons along the corridor, and to the UTMB campus. Specific improvements at Magnolia Homes include sidewalks, security lighting and handicap ramping. Improvements within the UTMB campus include wayfinding signage and ADA pedestrian access improvements. These improvements will greatly enhance transit patron access to the trolley. The City of Galveston has completed Preliminary Engineering for the project.

The project is estimated to cost $9.4 million in 2002 dollars, with a proposed Section 5309 New Starts share of $8.3 million. Because the proposed New Starts share is less than $25 million, the project is exempt from the New Starts criteria, and is thus not subject to FTA's evaluation and rating (49 USC 5309(e)(8)(A)).

Summary Description	
Proposed Project:	Fixed Rail Trolley Extension 1.5 Miles
Total Capital Cost ($2002):	$9.4 Million
Section 5309 New Starts Share ($2002):	$8.3 Million (80%) *
Annual Operating Cost ($YOE):	N/A
Ridership Forecast:	N/A

* Accounts for State toll revenue credits.

Status

The City of Galveston completed a Feasibility Analysis (Modified Major Investment Study) for extending its trolley system from the downtown area to UTMB and farther to the Gulf of Mexico. The Locally Preferred Alternative was adopted by the Houston-Galveston Area Council on July 27, 2001, and is included in the regional Transportation Improvement Program for fiscal years 1999-2001. Preliminary Engineering has been completed. FTA issued a Categorical Exclusion dated August 2001 on the basis of an Environmental Assessment prepared by the City. Prior to the completion of Final Design, Galveston will need to identify firm commitments of all non-Section 5309 New Starts funds required to construct and operate the project.

TEA-21 Section 3030 (a)(28) authorizes the "Galveston – Trolley Extension" for Final Design and construction. Through FY 2002, $4.95 million in Section 5309 New Starts funding has been appropriated for the Galveston Trolley Extension.

Locally Proposed Financial Plan		
Proposed Source of Funds	**Total Funding (million)**	**Percent of Total**
Federal:		
Section 5309 New Starts	$ 8.30	80.0 %
Department of Housing and Urban Development Community Development Block Grant	$ 0.53	5.1 %
State:		
Toll Revenue Credits	$ 0.93	9.0 %
Local:	$ 0.25	2.4 %
UTMB	$ 0.36	3.5 %
Unspecified		
Total: **	**$ 10.37**	
	[$ 0.93]	
	$ 9.44	100.0 %

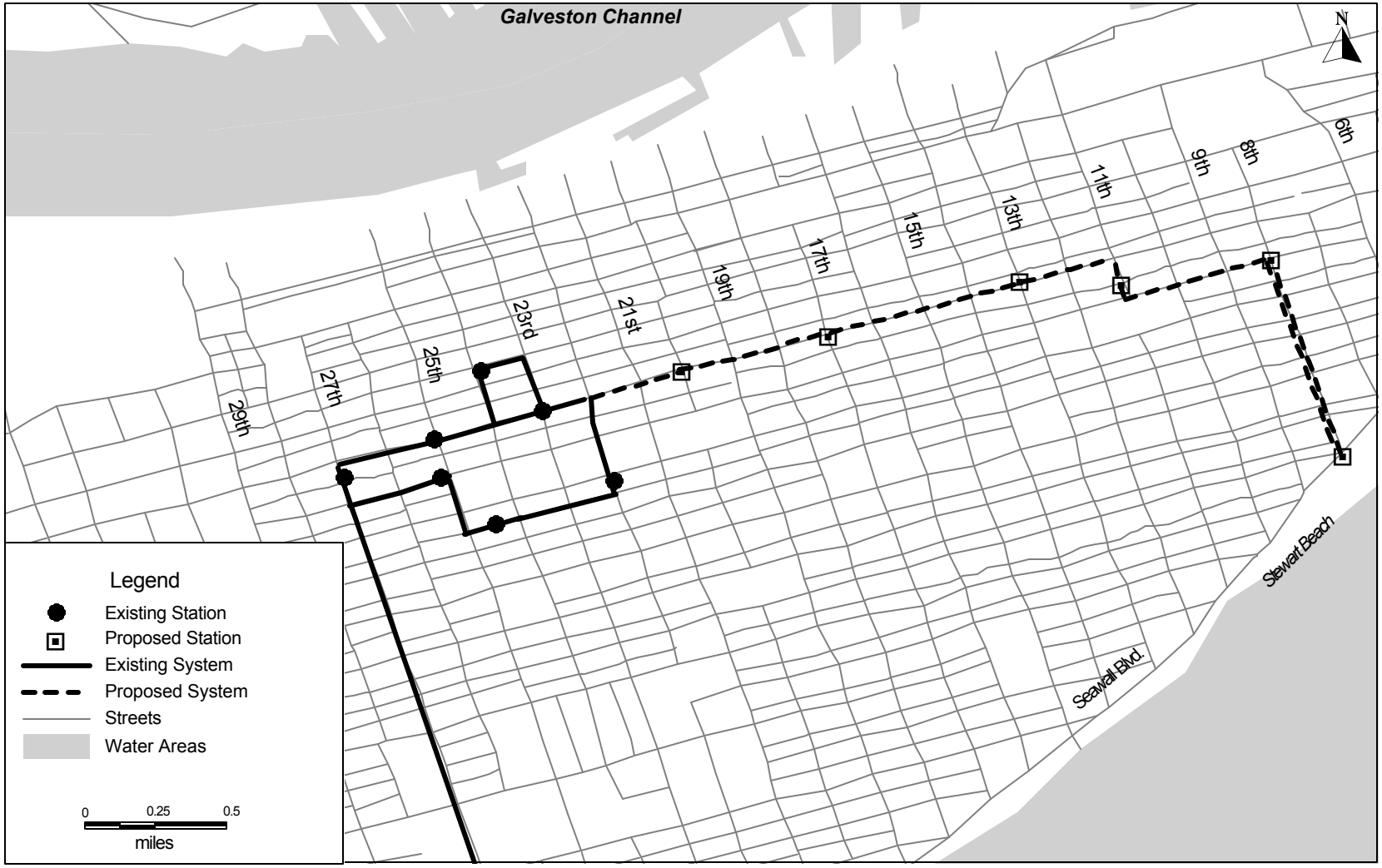
NOTE: Funding proposal reflects assumptions made by project sponsors, and are not DOT or FTA assumptions. Total may not add due to rounding.

** The statutory grant maximum is calculated based on the sum of the project cost and toll revenue credits; however, actual project costs do include toll revenue credits.

Project Cost + Toll Revenue Credits = Cost basis for Grant Match Requirement = $10.37 million.
Statutory Grant Maximum = 80% of $10.37 million = $8.30 million Section 5309 New Starts funding.
Actual Total Project Costs = Grant Cost Basis – Toll Revenue Credits = $10.37 million - $0.93 million = $9.44 million.

Rail Trolley Extension

Galveston, Texas



Federal Transit Administration, 2002

South Anchorage Double Track
Alaska Railroad Commuter Rail
Girdwood, Alaska
(November 2002)

Description

As a part of the Girdwood Commuter Rail Project, the Alaska Railroad Corporation (ARRC) is proposing track improvements between Girdwood and Wasilla. This project involves the double-tracking of an approximately five-mile section of the line south of Anchorage toward Girdwood. The double-tracking will increase speeds and facilitate operations in an industrial area of Anchorage where many ARRC freight customers are located. ARRC operates both freight and passenger service over the sections of trackage to be improved. The passenger service is primarily geared toward serving tourists between the months of May and September.

The total budget for this project is $7.0 million in current (2000) dollars. In FY 2001, the Girdwood Commuter Rail Project (including North Anchorage) received a New Starts appropriation of $14.9 million. Because the proposed New Starts share is less than $25 million, the project is exempt from the New Starts criteria, and is thus not subject to FTA's evaluation and rating (49 USC 5309(e)(8)(A)).

Summary Description	
Proposed Project:	Alaska Railroad Commuter Rail 5 Miles and 1 Existing Station
Total Capital Cost ($2000):	$7.0 Million
Section 5309 New Starts Share ($2000):	$5.6 Million (80%)
Annual Operating Cost:	N/A
Ridership Forecast:	N/A

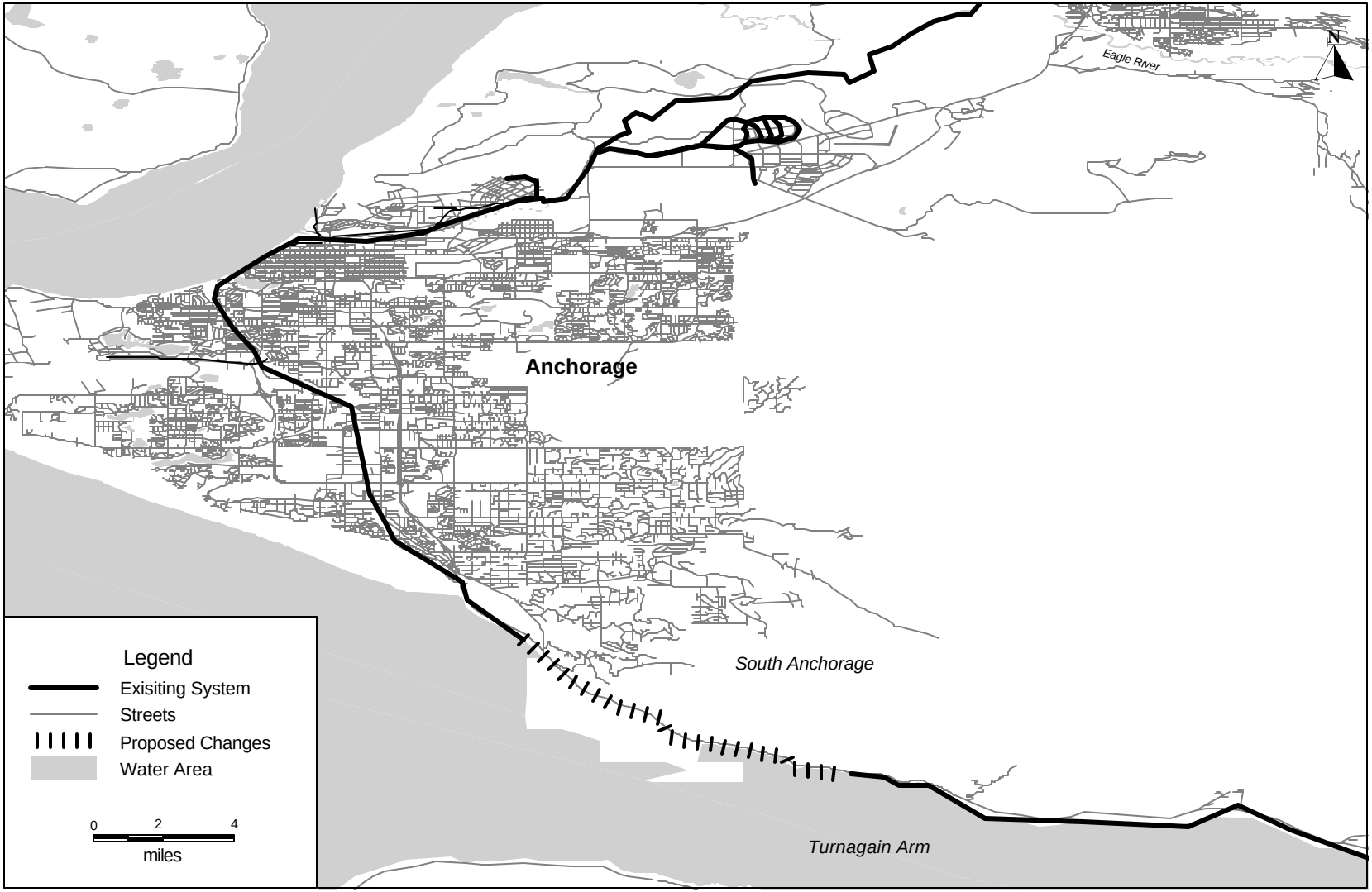
Status

In 1999 the ARRC undertook a study of its system titled the "Woodside Study," which assessed the overall condition of the railroad and the ability to undertake various types of improvements, including commuter rail. During 2000, the study identified the benefits of double track through the Anchorage area.

In June 2000, the Federal Transit Administration (FTA) approved entry into Preliminary Engineering for the Alaska Railroad Curve Straightening and Double Tracking Project. A documented Categorical Exclusion was issued in July 2000 for the South Anchorage project and in June 2001, it was approved for entry into Final Design. The project will be fully funded by the current appropriations and matching funds. Additional New Starts funds will not be needed to complete the project, although the AARC does intend to continue to seek Section 5309 New Starts funding for other projects. Through FY 2002, Congress has appropriated $27.25 million in Section 5309 New Starts funding for the commuter rail system. The project is not authorized in TEA-21.

Alaska Railroad- South Anchorage Double Track

Girdwood, Alaska



Federal Transit Administration, 2002

Eagle River to Knik River Track Improvements
Girdwood Commuter Rail Project
Girdwood, Alaska
(November 2002)

Description

As a part of the Girdwood Commuter Rail Project, the Alaska Railroad Corporation (ARRC) is proposing track improvements between Girdwood and Wasilla. This project will realign sharp curves north of Anchorage between Eagle River and Knik River. The track realignment will increase speeds, facilitate operations, and improve safety for ARRC customers and staff. ARRC operates both freight and passenger service over the section of trackage scheduled for improvement.

The capital cost of the project is estimated to be $12.5 million in current (2000) dollars, with a Section 5309 New Starts share of $10 million. Because the proposed New Starts share is less than $25 million, the project is exempt from the New Starts criteria, and is thus not subject to FTA's evaluation and rating (49 USC 5309 (e)(8)(A)).

Summary Description	
Proposed Project:	Eagle River to Knik River Improvements
Total Capital Cost ($2000):	$12.5 Million
Section 5309 New Starts Share ($2000):	$10.0 Million (80%)
Annual Operating Cost:	N/A
Ridership Forecast:	N/A

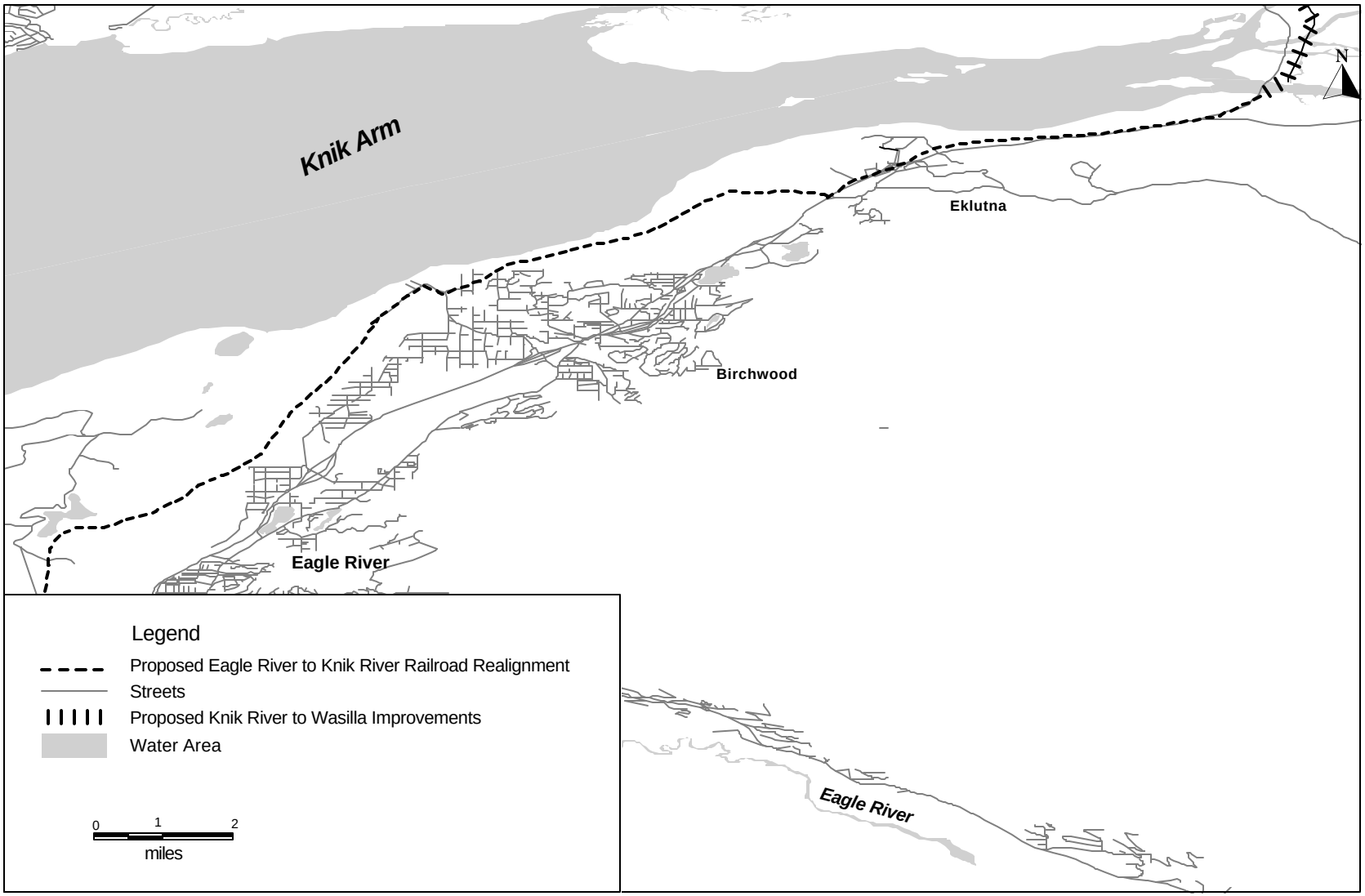
Status

In 1999 the ARRC undertook a study of its system titled the "Woodside Study," which assessed the overall condition of the railroad and the ability to undertake various types of improvements, including commuter rail. During 2000, the study identified the benefits of incrementally improving the performance of the railroad on its existing right-of-way.

In June 2000, FTA approved entry into Preliminary Engineering (PE) for the Alaska Railroad Curve Straightening and Double Tracking Project. FTA approved entry into Final Design in August 2001. Through FY 2002, Congress has appropriated $27.25 million in Section 5309 New Starts funding for the commuter rail system. The project is not authorized in TEA-21.

Alaska Railroad- Eagle River to Knik River Track Improvements

Girdwood, Alaska



Federal Transit Administration, 2002

Knik River to Wasilla Track Improvements
Girdwood Commuter Rail Project
Girdwood, Alaska
(November 2002)

Description

As a part of the Girdwood Commuter Rail Project, the Alaska Railroad Corporation (ARRC) is proposing track improvements between Girdwood and Wasilla. This project will realign sharp curves and rehabilitate two bridges between the Knik River and Wasilla. The track realignment will increase speeds, facilitate operations, and improve safety for ARRC customers and staff. ARRC operates both freight and passenger service over the section of trackage scheduled for improvement.

The capital cost of the project is estimated to be $11.3 million in current (2000) dollars. The FTA Section 5309 funding share is expected to be $9 million. Because the proposed New Starts share is less than $25 million, the project is exempt from the New Starts criteria, and is thus not subject to FTA's evaluation and rating (49 USC 5309(e)(8)(A)).

Summary Description	
Proposed Project:	Knik River to Wasilla Improvements
Total Capital Cost ($2000):	$11.3 Million
Section 5309 New Starts Share ($2000):	$9.0 Million (80%)
Annual Operating Cost:	N/A
Ridership Forecast:	N/A

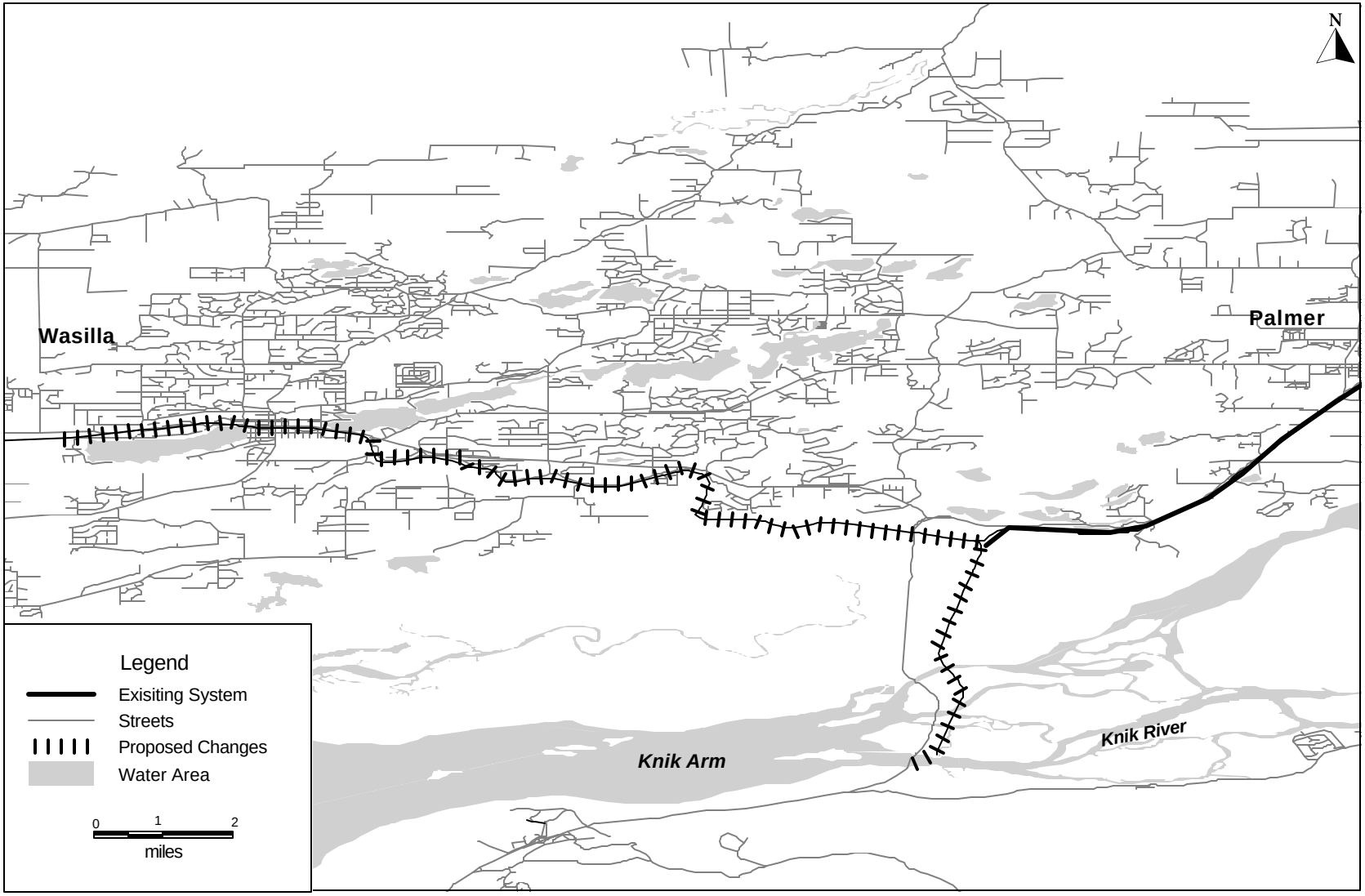
Status

In 1999 the ARRC undertook a study of its system titled the "Woodside Study," which assessed the overall condition of the railroad and the ability to undertake various types of improvements, including commuter rail. During 2000, the study identified the benefits of incrementally improving the performance of the railroad on its existing right-of-way.

In June 2000, FTA approved entry into Preliminary Engineering for the Alaska Railroad Curve Straightening and Double Tracking Project and approved entrance into Final Design in July 2001. A documented Categorical Exclusion was issued in June 2001 for the Knik River to Wasilla Track segment. The project was included in the Anchorage Metropolitan Transportation Study's (AMATS/Anchorage MPO) long range transportation plan 2001 update in April 2001. FTA issued a letter of no prejudice (LONP) for construction in December 2001. Through FY 2002, Congress has appropriated $27.25 million in Section 5309 New Starts funding for the commuter rail system. The project is not authorized in TEA-21.

Alaska Railroad- Knik River to Wasilla Track Improvements

Girdwood, Alaska



Federal Transit Administration, 2002

River Rail Project

Little Rock, Arkansas

(November 2002)

Description

The Central Arkansas Transit Authority (CATA) is planning the implementation of a vintage streetcar circulator system on existing right-of-way connecting the River Market and the Convention Center in downtown Little Rock to the Alltel Arena in North Little Rock and to Pulaski County. CATA proposes that service be provided by four replica streetcars operating on a single track and powered by overhead catenary. The proposed system includes a 2.6-mile alignment, purchase of vehicles, and construction of a maintenance facility. Ridership projections estimate 1,000 to 1,200 average weekday boardings with an additional 1,000 to 1,800 riders on special event days. A future extension to the William Jefferson Clinton Presidential Library site is being examined, as well as an additional half-mile loop in North Little Rock. Revenue service is planned to begin in Spring 2004.

The project is estimated to cost $15.1 million in escalated dollars, with a proposed Section 5309 New Starts share of $8.6 million. Because the proposed New Starts share is less than $25 million, the project is exempt from the New Starts criteria, and is thus not subject to FTA's evaluation and rating (49 USC 5309(e)(8)(A)).

Summary Description	
Proposed Project:	Vintage Streetcar System 2.6 Miles, 9 Stops
Total Capital Cost ($YOE):	$15.1 Million
Section 5309 New Starts Share ($YOE):	$8.6 Million (57%)
Annual Operating Cost ($YOE):	$0.7 Million
Ridership Forecast:	1,000 Average Weekday Boardings

Status

A feasibility study was completed in 1997. No formal Major Investment Study (MIS) was completed due to the limited scale of the proposed investment, the use of existing rail and street rights-of-way, and the estimated low cost. FTA approval to enter the Preliminary Engineering phase of project development was granted in May 1998. FTA approved project entrance into Final Design in September 1999.

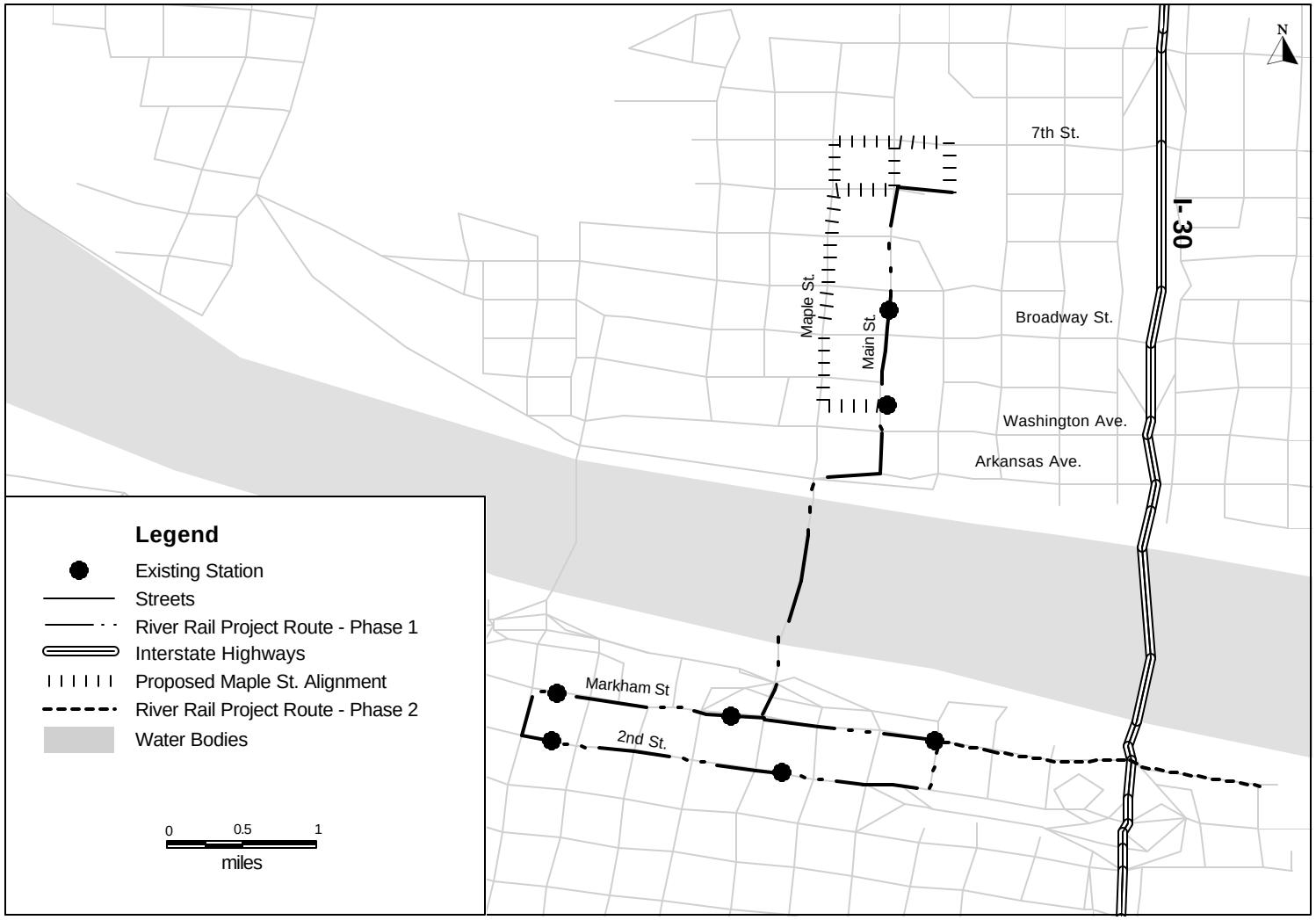
TEA-21 Section 3030(a)(36) authorizes the "Little Rock -- River Rail" project for Final Design and Construction. Through FY 2002, Congress has appropriated $7.93 million in Section 5309 New Starts funds to this project.

Locally Proposed Financial Plan		
Proposed Source of Funds	**Total Funding (million)**	**Percent of Total**
Federal:		
Section 5309 New Starts	$ 8.6	57.0 %
Flexible Funds (STP)	$ 3.9	25.8 %
Local:		
Local Municipalities (Pulaski County, Little Rock and North Little Rock)	$ 2.6	17.2 %
Total:	**$15.1**	100.0 %

NOTE: Funding proposal reflects assumptions made by project sponsors, and are not DOT or FTA assumptions. Total may not add due to rounding.

River Rail Project

Little Rock, Arkansas



Federal Transit Administration, 2002

LOSSAN Rail Corridor Improvements

Los Angeles and San Diego Counties, California

(November 2002)

Description

The Los Angeles-San Diego Rail Corridor Agency (LOSSAN) is implementing a long range plan to improve the safety, capacity and speed of intercity and commuter rail service between Los Angeles and San Diego. This 129-mile stretch of rail includes 18 stations (ten intercity/commuter and eight commuter only). Three operators provide service in the corridor: Amtrak operates intercity rail service (the *San Diegan*); the Southern California Regional Rail Authority (SCRRA) operates Metrolink commuter rail service; and the North (San Diego) County Transit District (NCTD) operates the Coaster commuter rail service. In addition, the LOSSAN Rail Corridor accommodates the only freight rail service into the San Diego region.

LOSSAN is proposing to utilize Section 5309 New Starts funding for two station-area improvements and to improve safety along a portion of the railway roadbed. Specifically, LOSSAN is proposing to stabilize erosion along the railway roadbed located along the oceanfront bluffs in the City of Del Mar.

Proposed improvements in the Del Mar Bluffs portion of the LOSSAN Rail Corridor are estimated to cost $27.2 million ($2001), with a proposed Section 5309 New Starts share of $10 million. Because the proposed New Starts share is less than $25 million, the project is exempt from the New Starts criteria, and is thus not subject to FTA's evaluation and rating (49 USC Section 5309(e)(8)(A)).

Summary Description	
Proposed Project:	Intercity Rail Improvements (Dell Mar Bluff roadbed stabilization)
Total Capital Cost ($2001):	$27.8 Million
Section 5309 New Starts Share ($2001):	$10 Million (37%)

Status

The LOSSAN agency was created to implement a program of rail system improvements in the three-county areas of Los Angeles, Orange, and San Diego. A formal Major Investment Study or Alternatives Analysis was not prepared for the proposed rail improvements. Some environmental and geotechnical work has been completed on each of the proposed improvements. Through FY 1997, Congress had appropriated $19.89 million in Section 5309 New Starts funding for several prior grade-separation projects along the LOSSAN Rail Corridor. TEA-21 Section 3030(b)(26) authorizes the LOSSAN (Del Mar-San Diego) corridor for Alternatives Analysis and Preliminary Engineering.

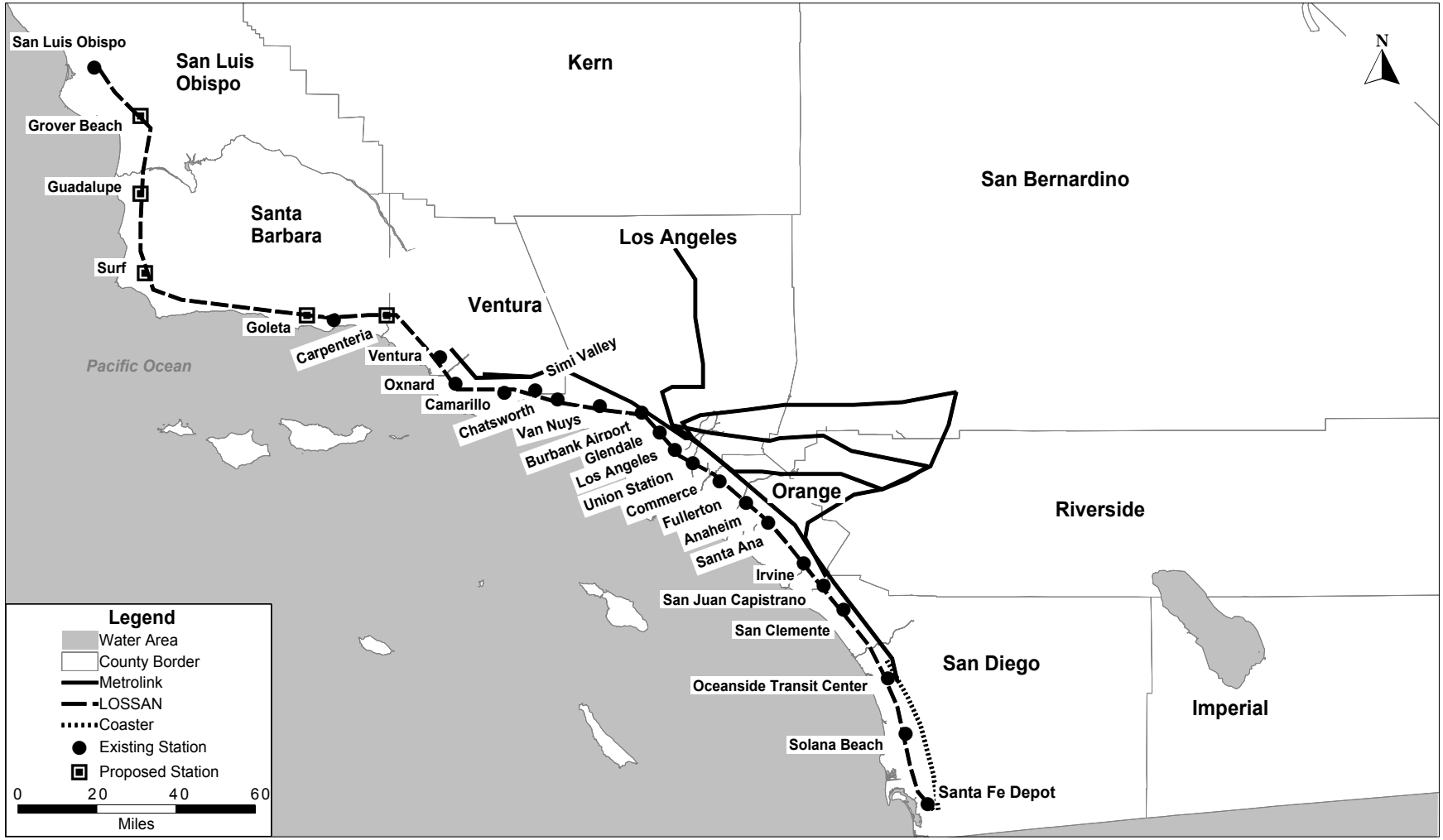
Congress has appropriated $3.95 million in New Starts funding for the San Diego LOSSAN Corridor project during the TEA-21 Authorization period. Thus, Congress has appropriated a total of $23.84 million through FY 2002.

Locally Proposed Financial Plan		
Proposed Source of Funds	**Total Funding ($million)**	**Percent of Total**
Federal: Section 5309 New Starts	$10.1	36.3 %
Local:	$17.7	63.6 %
Total:	**$27.8**	100 %

NOTE: Funding proposal reflects assumptions made by project sponsors, and not DOT or FTA assumptions. Total may not add due to rounding.

LOSSAN Rail Corridor Improvements

Los Angeles, California



Federal Transit Administration, 2002

East Corridor Commuter Rail

Nashville, Tennessee

(November 2002)

Description

The Metropolitan Transit Authority (MTA) and the Regional Transportation Authority (RTA) of Nashville, Tennessee are proposing the implementation of a 31.1-mile, six station commuter rail line between downtown Nashville and the City of Lebanon in Wilson County. The East Corridor commuter rail project is proposed to operate on an existing rail line owned by the Nashville and Eastern Railroad Authority (N&E), a governmental entity comprised of the Tennessee Department of Transportation (TDOT), Wilson County, Lebanon, Mt. Juliet, and the Metropolitan Government of Nashville and Davidson County. A passing siding will be added, two existing rail yards will be upgraded for vehicle storage and maintenance, and ten passenger rail vehicles will be acquired from the Maryland Rail Commuter Service (MARC) as part of the capital project cost. The required locomotives will be leased as part of the operating cost of the project.

The project is estimated to cost $37.6 million in escalated dollars, with a proposed Section 5309 New Starts share of $23.0 million. Because the proposed New Starts share is less than $25 million, the project is exempt from the New Starts criteria, and is thus not subject to FTA's evaluation and rating (49 USC 5309(e)(8)(A)).

Summary Description	
Proposed Project:	East Corridor Commuter Rail 31.1 Miles, 6 Stations
Total Capital Cost ($YOE):	$37.6 Million
Section 5309 New Starts Share ($YOE):	$23.0 Million (61%)
Annual Operating Cost (2006 $YOE):	$3.0 Million
Ridership Forecast (2006):	1,400 Average Weekday Boardings 700 Daily New Riders
Opening Year Ridership Forecast:	N/A

The project includes a proposed Federal share of 61 percent in Section 5309 New Starts funding. The Administration is seeking legislation that would limit the Federal New Starts share to no more than 50 percent beginning in FY 2004.

Status

In 1996, the MTA and RTA initiated a study to explore the potential of commuter rail in the Nashville region. From this study, six corridors were considered for further evaluation. A 1998 study analyzed the capital costs for the three most promising corridors. As the result of these studies and efforts of the Nashville Area Commuter Rail Task Force -- which includes the Nashville Chamber of Commerce, area business leaders, the MPO, MTA, RTA, the Tennessee Department of Transportation (TDOT), CSX Railroad and the Nashville and Eastern Rail

Authority, and the Nashville Congressional delegation -- the East Corridor was selected as the first corridor to be implemented in the Nashville Area Commuter Rail System.

The Nashville MPO included the East Corridor commuter rail project in its fiscally constrained long range transportation plan in September 1999. The FTA approved the project to advance into Preliminary Engineering in November 1999. The RTA completed an Environmental Assessment and received a Finding of No Significant Impact for the project in May 2000. In June 2001, FTA approved the project to advance into Final Design.

TEA-21 Section 3030(a)(50) authorizes the "Nashville Commuter Rail" project for Final Design and construction. Through FY 2002, Congress has appropriated $11.87 million for the project.

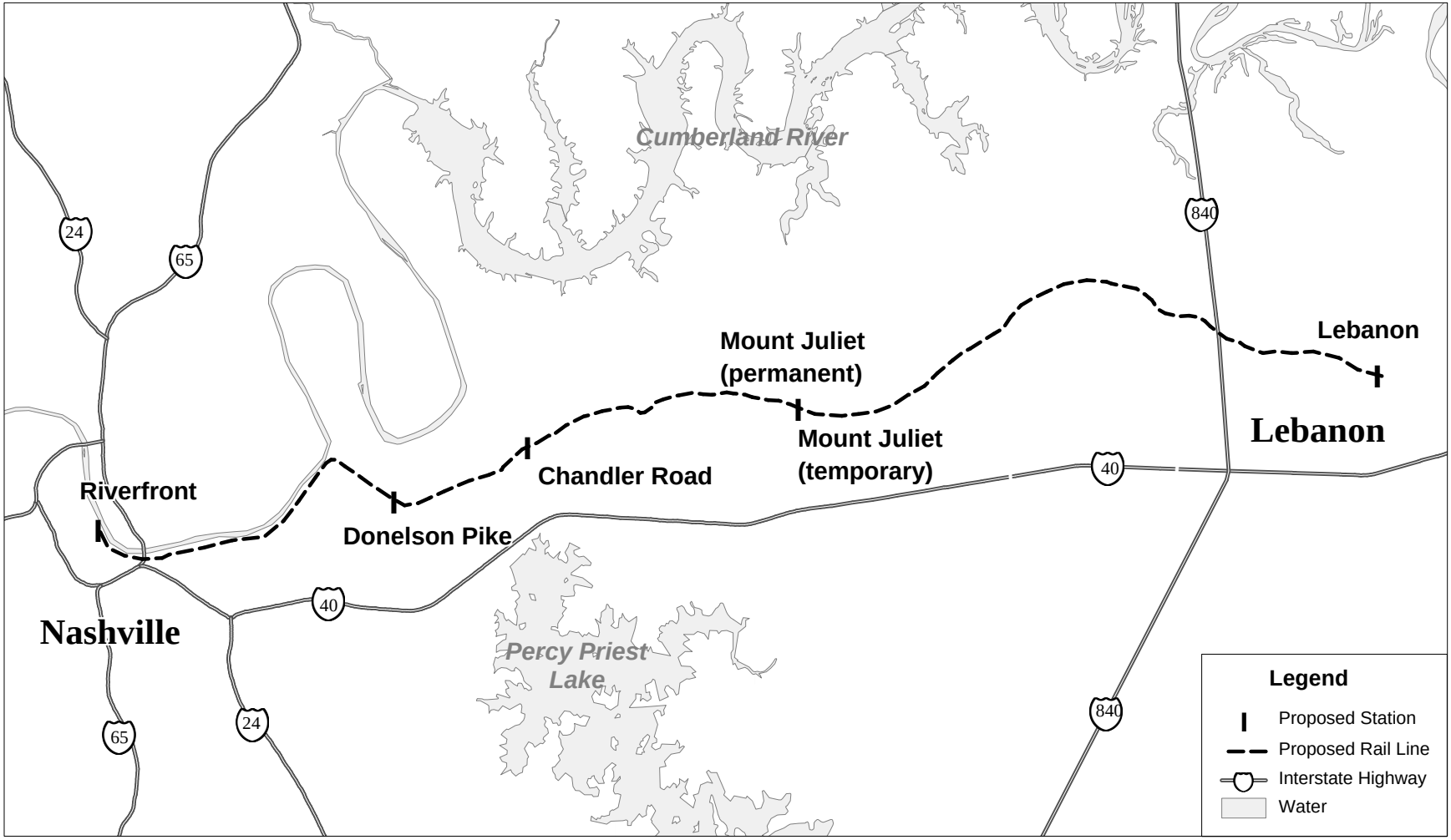
Locally Proposed Financial Plan

Proposed Source of Funds	Total Funding ($million)	Percent of Total
Federal:		
Sec. 5309 New Starts	$23.0	61.0%
FHWA Intermodal	$7.1	18.8%
State:		
TDOT – Transit Division	$3.8	10.1%
Local:		
Wilson County/Davidson County	$3.8	10.1%
Total:	**$37.6**	100.0%

NOTE: Funding proposal reflects assumptions made by project sponsors, and are not DOT or FTA assumptions. Total may not add due to rounding.

East Corridor Commuter Rail

Nashville, Tennessee



Federal Transit Administration, 2002

Long Island Rail Road East Side Access

New York, New York
(November 2002)

Description

The Metropolitan Transportation Authority (MTA) is the lead agency for the proposed Long Island Rail Road (LIRR) East Side Access (ESA) project. ESA would provide increased capacity for the LIRR, and direct access between suburban Long Island and Queens and a new passenger terminal in Grand Central Terminal (GCT) in east Midtown Manhattan in addition to continuing the current connection to Penn Station, located in west Midtown Manhattan. The ESA connection and increased LIRR capacity would be achieved by constructing a 4,600-foot tunnel from the LIRR Main Line in Sunnyside, Queens, to the existing tunnel under the East River at 63rd Street. LIRR trains would use the lower level of the bi-level structure. A second 5,000-foot tunnel would carry LIRR trains from the 63rd Street tunnel under Park Avenue into a proposed new LIRR terminal in the lower level of GCT. Ten new tracks and five platforms would be constructed for LIRR trains at GCT. In addition, a new LIRR station would be constructed at Sunnyside Yard (Queens) to improve transit access between Long Island City and Penn Station.

MTA anticipates that the implementation of ESA would provide LIRR with additional tunnel capacity across the East River. As a result, increased capacity and reduced headways would be introduced on most LIRR lines with the addition of 24 peak-hour trains that would operate through the existing 63rd Street tunnel to GCT, increasing transportation capacity into Manhattan by 45 percent and alleviating capacity constraints at Penn Station. By providing LIRR with direct access to GCT, MTA estimates that approximately 8,000 fewer people would ride subways from Queens to Manhattan in the peak period in the forecast year 2020. Additionally, approximately 19,000 fewer people would transfer onto Penn Station area subways in the peak period (2020), thus facilitating additional carrying capacity for other MTA rapid transit facilities.

Summary Description	
Proposed Project:	Commuter Rail Extension 4 Miles, 2 Stations
Total Capital Cost ($YOE):	$5.26 Billion
Section 5309 New Starts Share ($YOE):	$2.63 Billion (50%)
Annual Operating Cost (2020 $YOE):	$193.1 Million
Ridership Forecast (2020):	167,500 Average Weekday Boardings 15,400 Daily New Riders
Opening Year Ridership Forecast (2010):	151,000 Average Weekday Boardings
FY 2004 Finance Rating:	**Medium**
FY 2004 Project Justification Rating:	**Medium-High**
FY 2004 Overall Project Rating:	**Recommended**

The *Recommended* rating is primarily based on the strong transit-supportive environment throughout the corridor and the metropolitan area, anticipated mobility improvements, and the level of commitment of the non-Section 5309 New Starts share of the project's total estimated capital cost. The overall project rating applies to this *Annual Report on New Starts* **and reflects conditions as of November 2002.** Project evaluation is an ongoing process. As New Starts projects proceed through development, the estimates of costs, benefits, schedules and impacts are refined. **The FTA's ratings and recommendations will be updated annually to reflect new information, changing conditions and refined financing plans.**

Status

MTA completed a Major Investment Study for the Long Island Transportation Corridor in April 1998. In June 1998, the New York Metropolitan Transportation Council (NYMTC), the region's Metropolitan Planning Organization, passed a resolution endorsing the recommended extension of the LIRR into Grand Central Terminal. In September 1998, FTA approved MTA's request to enter Preliminary Engineering and initiate a Draft Environmental Impact Statement (DEIS) for the proposed project. The DEIS was completed in May 2000. The Final EIS was completed in March 2001. FTA issued a Record of Decision on the environmental review process in May 2001. FTA approved the LIRR ESA project into Final Design in February 2002.

TEA-21 Section 3030(a)(54) authorizes the LIRR ESA project for Final Design and construction. Through FY 2002, Congress has appropriated $68.23 million in Section 5309 New Starts funds for the project.

Evaluation

The following criteria have been estimated in conformance with FTA's *Reporting Instructions for the Section 5309 New Starts Criteria*, updated in June 2002. The project will be reevaluated in next year's *Annual Report on New Starts*.

Project Justification Quantitative Criteria		
Mobility Improvements Rating: High		
	New Start vs. Baseline	
Average Employment Per Station	286,100	
Average Low Income Households Per Station	2,221	
Transportation System User Benefit Per Project Passenger Mile (Minutes)	19.4	
Environmental Benefits Rating: High		
Criteria Pollutant Reduced (tons)	**New Start vs. Baseline**	
Carbon Monoxide (CO)	410	
Nitrogen Oxide (NO_x)	40	
Hydrocarbons	50	
Particulate Matter (PM_{10})	400	
Carbon Dioxide (CO_2)	30,810	
Annual Energy Savings (million) BTU	335,000	
Cost Effectiveness Rating: Medium		
	New Start vs. Baseline	
Cost per Transportation System User Benefit (current year dollars/hour)	$15.25	
Operating Efficiencies Rating: Medium		
	Baseline	**New Start**
System Operating Cost per Passenger Mile (current year dollars)	$0.23	$0.24

Project Justification
Rating: Medium-High

The *Medium-High* project justification rating reflects the strong transit-supportive land use in the corridor and the estimated mobility improvements that are anticipated from the implementation of the LIRR ESA project. Based on 1990 Census data, MTA estimates that there are an estimated 4,443 low-income households within a ½-mile radius of proposed station areas, including LIRR's stations at Jamaica, Woodside and John F. Kennedy International Airport. This represents approximately six percent of the total number of households within a ½-mile radius of the proposed project. MTA estimates that ESA would serve approximately 572,200 jobs that are located within a ½-mile radius of the two proposed station areas. New York City is designated by the U.S. Environmental Protection Agency as a "severe non-attainment area" for ozone and a "moderate non-attainment area" for carbon monoxide. The primary purpose of the

ESA project is to provide increased capacity for the LIRR and faster travel time for current transit riders by bringing patrons closer to their destinations in east Midtown Manhattan and by allowing existing customers traveling to Penn Station, located in west Midtown Manhattan, to travel in less crowded conditions as reflected in the transportation system user benefit measure. MTA estimates that the ESA project has an incremental cost per incremental trip value of $31.60. The incremental cost per incremental trip figure is high due to the difficulty of attracting new transit riders in a market in which the majority of commuters already use transit.

Existing Land Use, Transit-Supportive Land Use Policies and Future Patterns Rating: High

The *High* rating reflects the existing land use development in the Grand Central Terminal (GCT) area (Midtown Manhattan) that is highly transit supportive. In addition, City policies and zoning are in place to reinforce transit-supportive land use characteristics as opportunities emerge for continuing redevelopment and rehabilitation of buildings in the station areas. Moreover, the area surrounding the proposed station at the Sunnyside Yard in Long Island City, Queens, is an industrial area and is being redeveloped as a mixed-use business district.

Existing Conditions: The area surrounding GCT is located in a uniquely high-intensity setting where transit and walking are the dominant modes of mobility. In addition, approximately 550,000 employees work within a ½-mile radius of the proposed station at GCT, while over 50,900 persons reside within the area. Employment density within the GCT area is estimated at 813.8 employees per acre (520,840 employees per square mile). A mix of commercial, retail and office development characterizes the northern portion of the proposed Sunnyside Station in Long Island City. Redevelopment of the area is underway, as reflected by the construction of new office buildings and the conversion of industrial structures to commercial and institutional uses. A new Citibank Tower building is located directly to the north of Court Square near the Sunnyside station area. In addition, seven existing subway lines converge near Queens Plaza, less than a ¼-mile from the Sunnyside station area near the Queens Boulevard Bridge and en route to Court Square – generating substantial pedestrian activity. Approximately 25,000 employees are located in the station area, which includes a residential population of 9,300 persons. Population density is estimated at 14.23 residents per acre (9,100 persons per square mile) with an employment density of 40 jobs per acre (24,820 jobs per square mile).

Future Plans, Policies and Performance: Future land use in the Manhattan central business district (CBD) is expected to continue to be shaped by dense office development. In the year 2020, population in the GCT area is projected to increase four percent, while employment is forecast to increase by 21 percent. New York City policies anticipate and emphasize the concentration of office-related uses in the city's three existing CBDs: Midtown Manhattan, downtown Manhattan, and downtown Brooklyn, including a fourth planned CBD that would be developed in Long Island City (Queens). Accordingly, a trend toward more upgraded office uses is underway in Long Island City near the planned Sunnyside station. To facilitate these plans, while also enhancing the pedestrian environment, the New York City Department of Transportation is reconstructing the Queens Boulevard Bridge, which will provide access to the Sunnyside Station and widen the sidewalks in both directions. In addition, the MTA has

awarded a $2 million contract to examine options to improve pedestrian connections between the proposed Sunnyside Station and existing transit stations at Queens Plaza and Queensboro Plaza.

Other Factors

Limited off-street parking is available near GCT. High parking prices, resulting from market forces and city policies, serve as a strong deterrent to parking in the GCT area. Moreover, New York City policies discourage parking in CBDs. New York City levies a tax of over 18 percent on users of lots in Manhattan and existing zoning discourages the expansion of parking supplies. In addition, parking policies governing the Manhattan CBD could be extended to the area surrounding the proposed station in Long Island City, Queens (Sunnyside), as anticipated growth of commercial and office development progresses in the area. MTA also anticipates that the LIRR ESA project will play a major role in promoting the vitality of East Midtown Manhattan by channeling a share of future economic growth into the region's urban core.

Local Financial Commitment
Rating: Medium

The *Medium* local financial commitment rating was determined by the *Medium* rating for the operating financing plan.

Proposed Non-Section 5309 New Starts Share of Total Project Costs: 50%
Rating: Medium

The financial plan for the LIRR ESA project proposes Section 5309 New Starts funds and State and local funds.

Locally Proposed Financial Plan		
Proposed Source of Funds	**Total Funding ($million)**	**Percent of Total**
Federal: Section 5309 New Starts	$2,632.0	50.0 %
State/Local: MTA Dedicated Sources	$2,632.0	50.0 %
Total:	**$5,264.0**	100.0 %

NOTE: Funding proposal reflects assumptions made by project sponsors, and are not DOT or FTA assumptions. Total may not add due to rounding.

*Although MTA is requesting a total of $2.63 billion of Section 5309 New Starts funding, the amount of the Federal share for the LIRR East Side Access project is still being negotiated. In addition, given the size of this project and the difficulty with dividing it into more than one operable segment, alternative funding mechanisms in lieu of a traditional FFGA are being investigated. FTA and MTA are working to identify an appropriate first phase of a funding commitment, anticipated to be ready by early FY 2003.

Stability and Reliability of Capital Financing Plan
Rating: Medium-High

The *Medium-High* rating reflects the stability of the funding sources that are included in the MTA's financial plan for LIRR ESA: debt financing, bonding capacity, fare revenues, etc., including the agency's ability to obtain financing support from the MTA's non-Federal funding partners (City, State and private sector). The rating also acknowledges that, at this time, approximately 56 percent of the total non-Section 5309 New Starts share of the project's total estimated capital cost has been committed. However, the rating also reflects MTA's inability to identify specific capital funds for the construction of the proposed project due to the agency's Capital Improvement Program (CIP) cycles.

Agency Capital Financial Condition: MTA's financial condition, as shown in the agency's audited financial statements, is stable. MTA's bonds are rated in the upper-to-medium grade levels by the major credit rating agencies (Fitch, Moody's and Standard and Poor's). The average age of the agency's bus fleet is 5.4 years. The average age of the MTA's rail fleet is 27.6 years, two years/28 years (diesel/electric rail fleet), and 21 years, for New York City Transit, LIRR and Metro-North Railroad, respectively. Annual trips throughout MTA's transportation network reached 2.34 billion in 2001. MTA is nearing completion of a $14 billion restructuring of the agency's debt obligations (the largest debt restructuring in the history of the municipal market). This action will consolidate 13 of MTA's existing 16 credits into four new credits. The debt-restructuring plan, which was approved by the New York legislature's Capital Program Review Board (CPRB) in early 2002, is anticipated to generate approximately $4.5 billion in cash flow for the MTA. MTA anticipates that this action will also result in stronger credits, improved bond ratings and allow the agency to manage its debt more efficiently.

Capital Cost Estimate and Contingencies: The current total capital cost estimate increased approximately 21 percent from the estimate included in last year's *Annual Report on New Starts* as a result of more detailed engineering and in accordance with several recommendations made by the U.S. Army Corps of Engineers following an independent assessment of LIRR ESA's contracting methodology and cost estimates. The current capital cost estimate also includes a five percent ($250 million) project-wide reserve. Given the current stage of project development, this estimate is reasonable. However, at this time, MTA has not executed a Memorandum of Agreement (MOA) with Amtrak regarding the necessary design and construction activities that are needed for LIRR ESA within the Harold Interlocking right-of-way in Queens, New York, where both LIRR and Amtrak passenger trains currently operate. Continued delays in the execution of an MOA could have an adverse impact on the LIRR ESA project. The current capital cost estimate will be closely examined by MTA for any potential cost-saving measures to keep the estimate within the overall project budget.

Existing and Committed Funding: At this time, approximately 56 percent ($1.5 billion) of the total non-Section 5309 New Starts share of the project's total estimated capital cost has been committed in the MTA's FY 2000-FY 2004 CIP. MTA has indicated that the remaining 44 percent ($1.1 billion) would be committed in future MTA CIPs. Yields from MTA's debt restructuring, under projected market conditions, are anticipated by MTA to provide an additional $1 billion in bond proceeds without an increase in the agency's annual debt obligations. The State's CPRB approved the MTA's debt restructuring plan in early 2002.

New and Proposed Sources: No new funding sources are proposed.

Stability and Reliability of Operating Finance Plan
Rating: Medium

The *Medium* rating acknowledges MTA's adequate operating condition. Revenues, including farebox receipts and other dedicated sources to operate the proposed LIRR ESA project, are considered sufficient at this time. However, the rating also acknowledges MTA's inability to identify specific revenue sources that would be used to operate the project. The rating also acknowledges MTA's anticipated operating budget deficit for the agency's 2003-2005 budgetary cycle.

Agency Operating Financial Condition: MTA's audited financial statements indicate that the agency is currently operating within a sound financial framework. MTA's farebox recovery rate for the past ten years has ranged between 45 percent and 58 percent, reflecting stability in the agency's operating revenues and expenses. However, MTA is currently projecting $2.7 billion operating deficit for the agency's 2003-2005 budgetary cycle. MTA reports that the anticipated operating deficit is attributable to a downturn in the regional economy, labor costs, and a reduction in State and city financial contributions. MTA is currently preparing a series of cost-saving measures to address the projected deficit.

Operating Cost Estimates and Contingencies: Annual operating and maintenance costs for the LIRR ESA project are estimated at $193.1 million (escalated dollars). This estimate is considered reasonable. MTA's total operating and maintenance costs [agency-wide] for the years 2012-2020 are estimated to be $83 billion. LIRR revenues for the same period are projected at $667 million. Between the years 2005-2020, MTA estimates LIRR annual growth in commuter rail revenues to range between 3.7 percent to 4.9 percent, except for the year 2012 when MTA projects an increase of 8.9 percent, with the completion of ESA and the project's first full year of operations. MTA determined these estimates by comparing ridership forecasts and fare assumptions for transit fares and the combined impact of ridership growth and annual inflationary fare adjustments for commuter fares. Based on MTA's projections, operating and maintenance costs for LIRR ESA are considered minimal, in comparison to MTA's overall operating expenses.

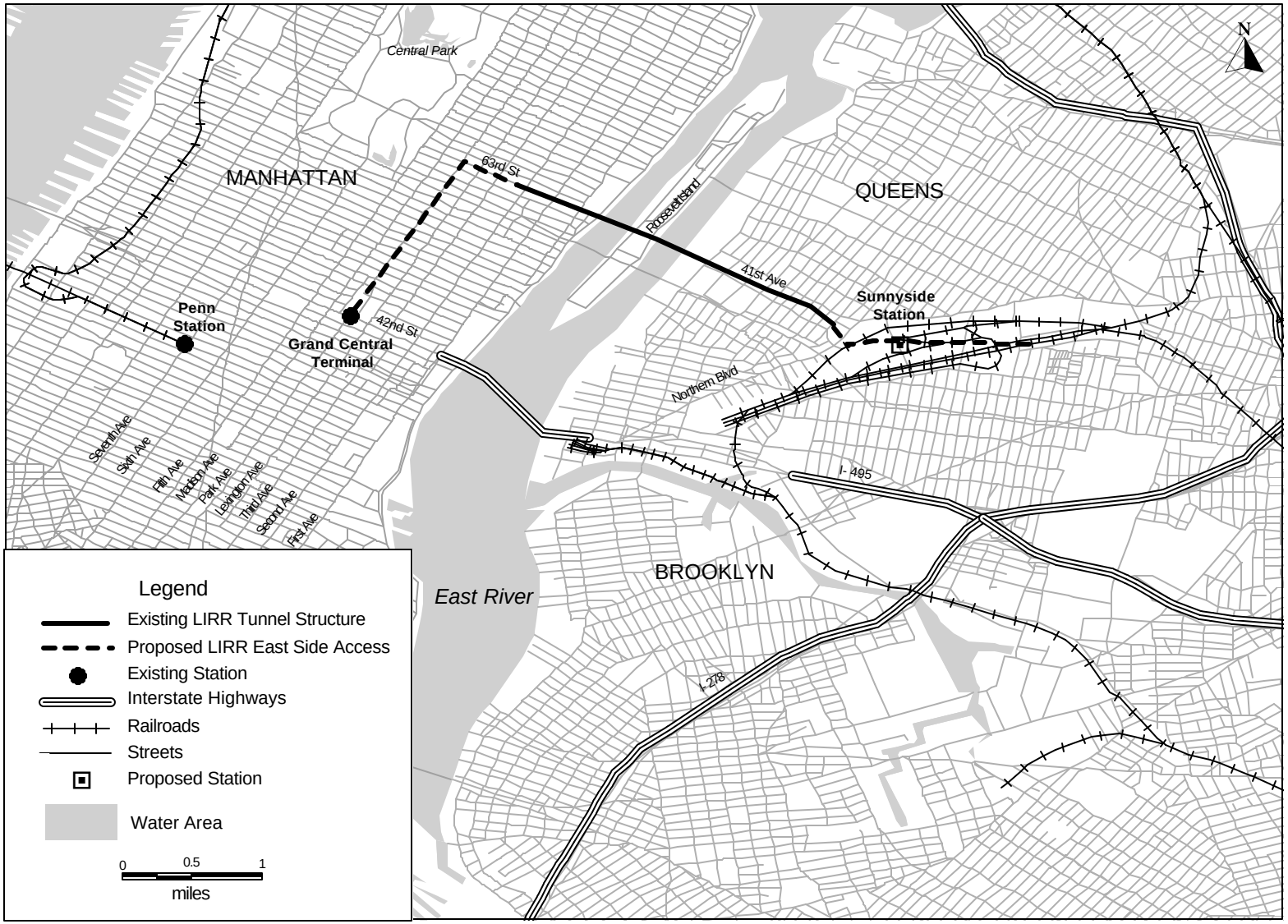
Existing and Committed Funding: All proposed operating funding sources (fares, dedicated revenues, State and local operating assistance, etc.) currently exist. The MTA did not provide a system-wide operating plan outlining forecasted revenue sources and specifically matching them to the proposed project. MTA's documentation indicates that cash flow needs for operations,

debt service payments and capital investments are funded from a pool of the agency's dedicated revenue sources.

New and Proposed Funding Sources: No new funding sources for operating revenues are proposed for the Long Island Rail Road East Side Access project.

Long Island Rail Road East Side Access

New York, New York



Federal Transit Administration, 2002

Rhode Island Commuter Rail Improvement Program

Pawtucket Layover Facility

Pawtucket, Rhode Island

(November 2002)

Description

The Pawtucket Layover Facility Project is a joint Rhode Island Department of Transportation (RIDOT)/Massachusetts Bay Transportation Authority (MBTA) venture, consisting of the design and construction of a six-track commuter rail yard for the purpose of overnight layover/storage of commuter rail equipment, to serve both the existing Providence-Boston service and Rhode Island's future South County commuter rail service. The proposed site is located in the northwest quadrant of the I-95 and Smithfield Avenue Interchange on the Pawtucket/Providence city line. The 12-acre parcel is situated adjacent to and east of the Amtrak Main Line.

The facility will provide for future commuter rail growth both at Providence and South County, Rhode Island. Currently, commuter rail carries approximately 825 riders per day at Providence with eight round trips. Ridership is expected to grow to 1,050 riders per day in 2005 with eleven round trips. Ridership studies conducted to date for the proposed South County Commuter Rail Service show an expected 2,550 riders per day would use the service to Providence.

The total capital cost for this project is $18.5 million, with a proposed Section 5309 New Starts share of $10 million. Because the proposed New Starts share is less than $25 million, the project is exempt from the New Starts criteria, and is thus not subject to FTA's evaluation and rating (49 USC Section 5309 (e)(8)(A)).

Summary Description	
Proposed Project:	Pawtucket Layover Facility
Total Capital Cost ($YOE):	$18.5 million
Section 5309 New Starts Share ($YOE):	$10 million (54%)
Annual Operating Cost ($2003):	$1.0 million
Opening Year Ridership Forecast:	N/A

The project includes a proposed Federal share of 54 percent in Section 5309 New Starts funding. The Administration is seeking legislation that would limit the Federal New Starts share to no more than 50 percent beginning in FY2004.

Status

RIDOT, in conjunction with the MBTA, has proposed the development of a commuter rail layover yard in Pawtucket, Rhode Island. The project is included in Rhode Island's Long Range Ground Transportation Plan, and has been adopted by the State MPO in the Transportation Improvement Program (TIP).

Based on the environmental documentation submitted by RIDOT, FTA found that the specific conditions or criteria for a Categorical Exclusion under 23 CFR 771.117(d)(11) were satisfied and that significant environmental impacts would not result. FTA issued an environmental determination on December 3, 1999.

Preliminary Engineering and Final Design have been completed. This project was approved for Final Design in April 2001. Construction is expected to begin in Winter 2003 and be completed in 2004. The layover yard would begin operations in early 2004.

The MBTA, as the responsible agency for Final Design and construction, has developed a recent construction cost estimate of $18.5 million (escalated dollars) for this project. RIDOT and MBTA propose completing the project with Section 5309 New Starts funds, Section 5309 Fixed Guideway Modernization funds, and MBTA funds.

The Pawtucket Layover Facility was authorized in TEA-21 in Section 3030 (c)(1)(A)(xliii). Through FY 2002, RIDOT has received $5.45 million in Section 5309 New Starts appropriations for this project.

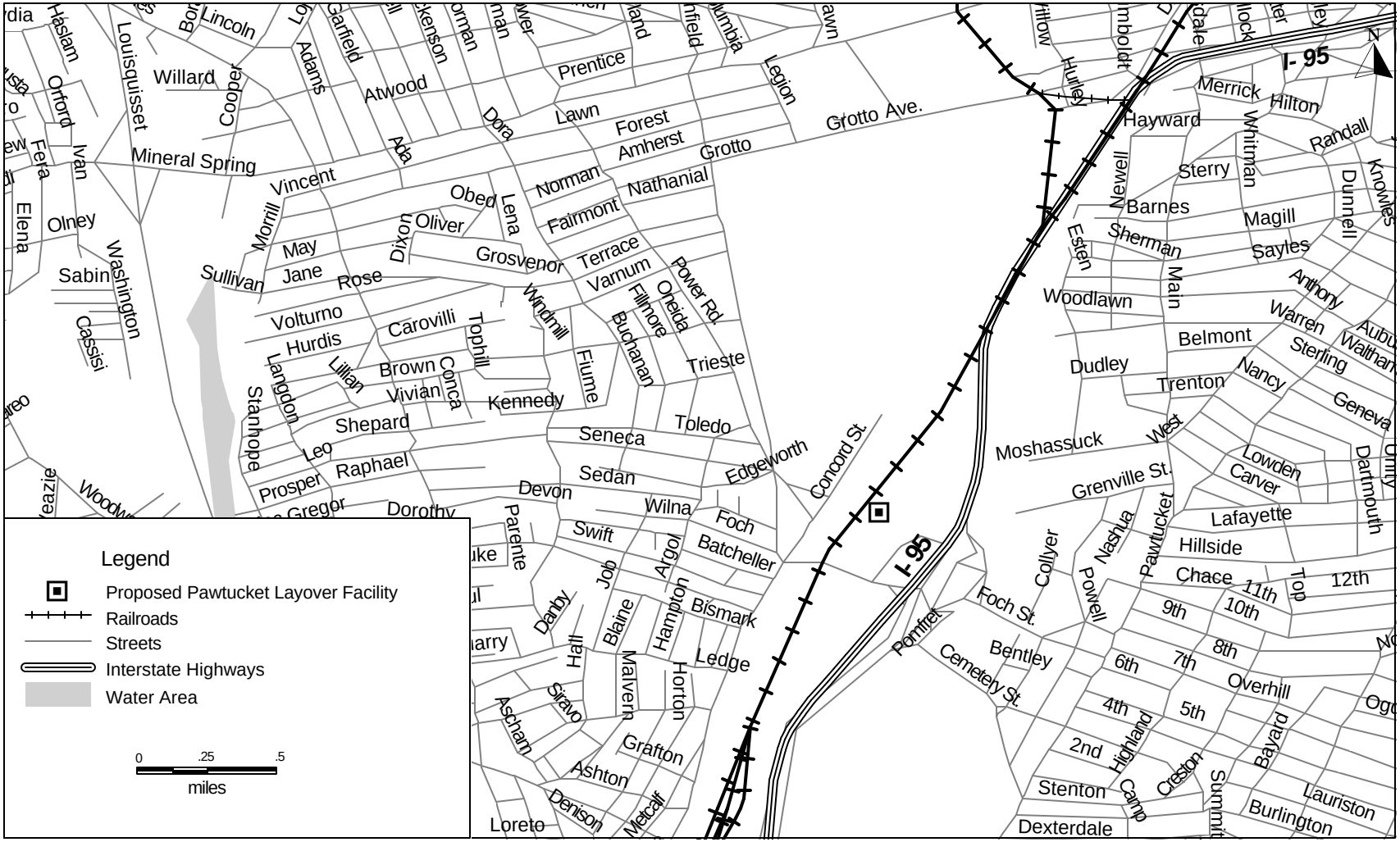
Locally Proposed Financial Plan

Proposed Source of Funds	Total Funding ($millions)	Percent of Total
Federal:		
Section 5309 New Starts	$10.0	54.1%
Section 5309 Fixed Guideway Modernization	$4.7	25.4%
Local:		
MBTA Bonds	$3.8	20.5%
Total:	**$18.5**	100.0%

NOTE: Funding proposal reflects assumptions made by project sponsors, and are not DOT or FTA assumptions. Total may not add due to rounding.

Commuter Rail Improvement Program

Pawtucket, Rhode Island



Federal Transit Administration, 2002

Alaska Marine Highway System

Prince William Sound, Alaska
(November 2002)

Description

The Alaska Marine Highway System (AMHS) of the Alaska Department of Transportation and Public Facilities proposes to use funds available through the Alaska/Hawaii Ferry discretionary program to purchase a new high-speed ferry. The comprehensive and larger AMHS fleet improvement plan calls for four new high speed ferries to provide service to communities in the following minimum operable segment (MOS) corridors:

- Whittier, Valdez, Cordova (MOS 1)
- Juneau, Sitka (MOS 2)
- Ketchikan, Petersburg (MOS 3)
- Juneau, Petersburg (MOS 4)

The FTA-funded vessel for this project will provide daily, point-to-point service in the Prince William Sound region of southeast Alaska between Whittier, Valdez and Cordova (MOS 1). Compared to conventional ferries, the fast ferry will provide service that is more reliable, consistent and convenient for passengers and crew. Daily service will provide easier access to medical and other professional services.

For this project, an existing vessel design will be modified under one contract. Vessel construction, under separate contract, will be off-site. Vessel delivery is anticipated in 2005.

The capital cost of the project is estimated to be $38.5 million. The FTA Section 5309 funding share is expected to be $24.9 million. Because the proposed New Starts share is less than $25 million, the project is exempt from the New Starts criteria, and is thus not subject to FTA's evaluation and rating (49 USC 5309(e)(8)(A)).

Summary Description	
Proposed Project:	Alaska Marine Highway System
Total Capital Cost ($YOE):	$38.5 Million
Section 5309 New Starts Share ($YOE):	$24.9 Million (65%)
Annual Operating Cost:	N/A
Ridership Forecast:	N/A

Status

The Prince William Sound Ferry purchase was included in the State Transportation Improvement Program (STIP) 2001-2003 in February 2000. The project is also included in the *Prince William Sound/Copper River Area Transportation Plan, November 2000.*

FTA approved AMHS to initiate Preliminary Engineering and Final Design in August 2001. Through FY 2002, Congress has appropriated $41.01 million in Section 5309 New Starts funds for the Alaska/Hawaii ferry projects.

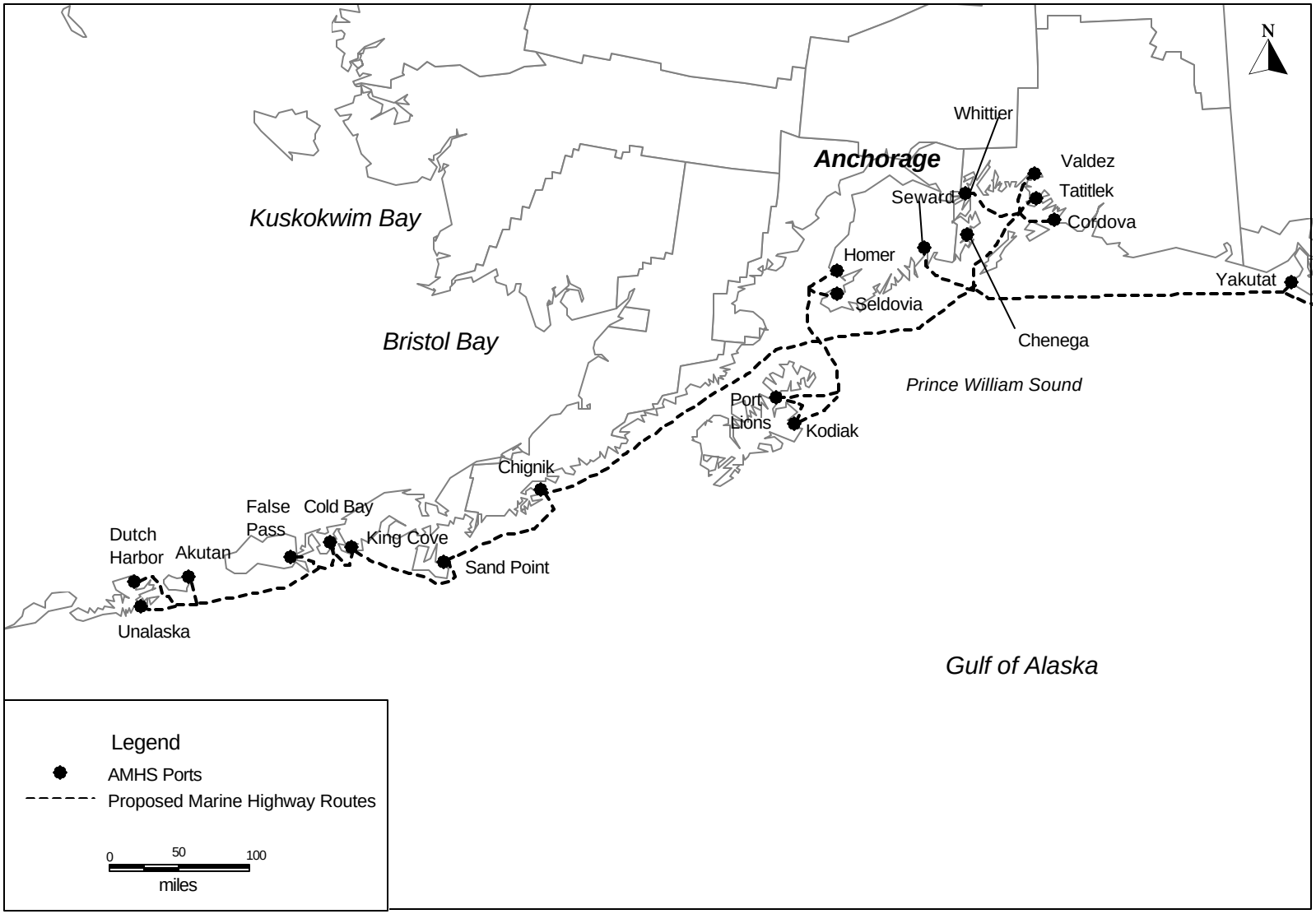
Locally Proposed Financial Plan

Proposed Source of Funds	Total Funding ($million)	Percent of Total
Federal:		
Section 5309 New Starts	$24.9	64.8%
FHWA	$5.8	15.1%
State:		
State Match	$7.7	20.1%
Total:	**$38.5**	100.0%

NOTE: Funding proposal reflects assumptions made by project sponsors, and are not DOT or FTA assumptions. Total may not add due to rounding.

Alaska Marine Highway System

Prince William Sound, Alaska



Federal Transit Administration, 2002

Central Link Initial Segment

Seattle, Washington

(November 2002)

Description

Sound Transit (Central Puget Sound Regional Transit Authority) is proposing to implement a 13.9-mile light rail system, called the Central Link Initial Segment, from Convention Place through downtown Seattle to South 154th Station. The system would use the existing 1.3-mile Downtown Seattle Transit Tunnel (DSTT), the 1-mile Beacon Hill tunnel and include 0.1 miles of new tunnel (the Pine Street stub tunnel) in the vicinity of the Convention Place station. The small portion of tunnel that will be constructed will be used only for turnback operations. The Central Link Initial Segment is the first phase of a planned 24-mile light rail system called Link. The entire Link system will extend approximately three miles northward to Northgate and approximately eight miles southward to South 200th Street.

The Link LRT system is one element of Sound Transit's voter-approved ten-year $3.9 billion (in 1995 dollars) Sound Move regional transit plan, which also includes the implementation of a 1.6-mile LRT line in downtown Tacoma; an 82-mile Sounder commuter rail system operating between Lakewood and Everett; 19 new regional express bus routes; and 45 major capital projects including 14 High Occupancy Vehicle (HOV) direct access ramps (providing access to over 100 miles of existing HOV lanes), 14 new park-and-ride facilities, nine transit centers, and other service improvements.

The proposed light rail project will connect several of the region's major activity centers. The project will expand transit capacity within the region's most dense and congested corridor, provide a practical alternative to driving on increasingly congested roadways, support comprehensive land use and transportation planning, provide environmental benefits, and improve mobility for residents in the corridor.

Summary Description	
Proposed Project:	Light Rail Transit Line 13.9 Miles, 11 Stations
Total Capital Cost ($YOE):	$2,491.6 Million
Section 5309 New Starts Share ($YOE):	$500 Million (20%)
Annual Operating Cost (2020 $YOE):	$42.2 Million
Ridership Forecast (2020):	42,500 Average Weekday Boardings 29,000 Daily New Riders
Opening Year Ridership Forecast:	N/A
FY 2004 Finance Rating:	**Medium-High**
FY 2004 Project Justification Rating:	**Medium-High**
FY 2004 Overall Project Rating:	**Highly Recommended**

The overall project rating of *Highly Recommended* is based on the project's adequate justification criteria and capital and operating plans. The overall project rating **reflects conditions as of November 2002**. Project evaluation is an ongoing process. As New Starts projects proceed through development, the estimates of costs, benefits, schedules, and impacts are refined. **The FTA ratings and recommendations will be updated annually to reflect new information, changing conditions and refined financing plans.**

Status

The Sound Transit Board adopted the Sound Move regional transit plan in May 1996. Voters approved $3.9 billion in local funding for implementation of the plan in November 1996. A Major Investment Study was completed in March 1997. Sound Move is included in the Puget Sound Regional Council's (the area's Metropolitan Planning Organization) long range transportation plan and Transportation Improvement Program.

FTA approved the initiation of Preliminary Engineering on the Link LRT in July 1997. A Draft Environmental Impact Statement (EIS) was published in December 1998. The Final EIS was completed in November 1999. FTA issued a Record of Decision in January 2000. The Sound Transit Board formally adopted a 7.2-mile initial Minimum Operable Segment (MOS) for Federal participation in November 1999. The MOS ran from NE 45th Street at the University of Washington to the maintenance base at South Lander Street in the industrial area south of downtown Seattle. Approximately 4.5 miles of this was new tunnel under Capitol Hill, Portage Bay, and the University of Washington. FTA approved the project's advancement into Final Design in February 2000. Based on increased costs for tunneling, right-of-way, mitigation, and other factors, Sound Transit increased the total project cost for the former MOS-1 and rescheduled the revenue operations date. In January 2001, the Sound Transit Board adopted the revised budget and schedule. FTA reviewed the revised finance plan, project management plan, and revised New Starts criteria. FTA entered into a Full Funding Grant Agreement (FFGA) for the former MOS-1 in January 2001.

After Congress and the U.S. Department of Transportation, Office of Inspector General, raised significant questions about project costs, the Sound Transit Board directed staff to re-examine the entire project. Staff had to determine if a portion of the 20-mile Locally Preferred Alternative could be identified as a new initial segment, or if MOS-1 could be redefined to reduce risks and better meet budget limitations. During this re-examination, the Board maintained its commitment to build the entire alignment. In September 2001, the Sound Transit Board identified the current Initial Segment from Convention Place to South 154th Station and in November 2001, it formally adopted the Initial Segment as a new MOS. An additional environmental review assessed the impacts of project changes, including the new termini and joint bus-rail operations in the DSTT and a new alignment through the City of Tukwila. A Supplemental EIS on the Tukwila segment was published in November 2001. The federal environmental review of the Central Link Initial Segment was completed in May 2002. Based upon supplemental environmental and financial review, FTA approved the project's entrance into Final Design in August 2002.

Through FY2002, Sound Transit has received $90.97 million in New Starts funding for this project.

Project Justification Quantitative Criteria		
Mobility Improvements Rating: Medium		
	New Start vs. Baseline	
Average Employment Per Station	15,389	
Average Low Income Households Per Station	238	
Transportation System User Benefit Per Project Passenger Mile (Minutes)	3.2	
Environmental Benefits Rating: Medium		
Criteria Pollutant Reduced (tons)	**New Start vs. Baseline**	
Carbon Monoxide (CO)	465	
Nitrogen Oxide (NO_x)	33	
Hydrocarbons	46	
Particulate Matter (PM_{10})	1	
Carbon Dioxide (CO_2)	9,833	
Annual Energy Savings (million) BTU	120,143	
Cost Effectiveness Rating: Medium		
	New Start vs. Baseline	
Cost per Transportation System User Benefit (current year dollars/hour)	$16.27	
Operating Efficiencies Rating: Medium		
	Baseline	**New Start**
System Operating Cost per Passenger Mile (current year dollars)	$0.52	$0.51

[ ] indicates an increase in emissions.

Evaluation

The following criteria have been estimated in conformance with FTA's *Reporting Instructions for the Section 5309 New Starts Criteria*, updated in June 2002. FTA has evaluated this project as being in Final Design.

Project Justification Rating: Medium-High

The *Medium-High* project justification rating reflects the project's average cost effectiveness rating and strong land use policies. Based on 1990 Census data, there are an estimated 2,616 low-income households within a ½-mile radius of the proposed stations, representing 18.1 percent of all households located within ½ mile of the stations. There are an estimated 169,300

jobs within a ½-mile radius of the proposed stations. The Central Puget Sound Region is classified by the U.S. Environmental Protection Agency as a "maintenance area" for carbon monoxide, ozone, and particulate matter. The Central Link Initial Segment has an incremental cost per incremental trip value of $15.58.

Transit-Supportive Existing Land Use and Future Patterns
Rating: Medium-High

The *Medium-High* land use rating acknowledges that existing land uses along the proposed transit corridor are moderately transit-supportive, with intensive land uses in the northern portion and less dense development in the southern portion of the corridor. The rating recognizes the strong land use policies in place in the corridor and throughout the region.

Existing Conditions: The proposed 14-mile Central Link LRT Initial Segment runs south from downtown Seattle through the Rainier Valley in southeast Seattle to the Cities of Tukwila and SeaTac. In 1997, station area population (within ½ mile of station locations) was estimated at 44,600 and station area employment at 169,300, mostly in the CBD. Average population densities are moderate at 6,400 persons per square mile. Major trip generators include professional and college sports stadiums and SeaTac International Airport (served by a one-mile shuttle). The CBD contains residential as well as commercial development in a pedestrian-friendly environment. Neighborhoods in southeast Seattle are laid out on a grid street system with sidewalks and pedestrian crossings, but commercial use designs tend to be auto-oriented. Most neighborhoods are moderate-density single-family at roughly eight units per acre, with some pockets of multi-family development. High parking costs in the CBD, averaging over $20 per day, limit the desirability of parking.

Future Plans Policies and Performance: Strong growth management policies have been adopted at a state, regional, and local level. A regional plan, Vision 2020, establishes urban growth boundaries and calls for higher-density, transit- and pedestrian-focused development. State law requires local consistency with regional growth management plans. Plans by the Cities of Seattle and SeaTac promote higher-density, mixed-use, and pedestrian-friendly development in transit station areas. Specifically, Seattle's Comprehensive Plan identifies a network of Urban Centers, Hub Urban Centers, and Residential Villages within which new growth will be concentrated. The City of Seattle and Sound Transit have developed station area conceptual plans, including policy recommendations and implementation mechanisms. Consistent with these plans, an overlay district has been applied to station areas in the MOS corridor. This district prohibits auto-oriented uses and has changed standard commercial zoning to neighborhood commercial zoning, which allows mixed uses and includes pedestrian-oriented design requirements. While single-family zoning on 5,000 square feet lots (eight units per acre) has been preserved in residential areas, neighborhood commercial and multi-family residential zoning typically allows 26 to 43 units per acre. Local agencies and jurisdictions are also working to promote transit-oriented development (TOD). Sound Transit has developed a set of policies and a work program for joint development; King County has undertaken a TOD demonstration program; and the Puget Sound Regional Council has undertaken an education and outreach program on transit communities. Finally, the City of SeaTac has negotiated agreements with landowners around stations to make developments more transit-supportive.

Local Financial Commitment
Rating: Medium-High

The *Medium-High* local financial commitment rating was determined by the *Medium-High* rating for the capital financing plan and the *Medium-High* rating for the operating finance plan.

Proposed Non-Section 5309 New Starts Share of Total Project Costs: 80%
Rating: High

The project's financial plan includes Section 5309 New Starts funding and local funding from sales taxes and bonds.

Locally Proposed Financial Plan		
Proposed Source of Funds	**Total Funding ($million)**	**Percent of Total**
Federal: Section 5309 New Starts	$500.0	20.0 %
Local: Retail Sales and Vehicle Excise Taxes	$919.7	37.0 %
Long-Term Bonds	$1,071.9	43.0%
Total:	**$2,491.6**	100.0 %

NOTE: Funding proposal reflects assumptions made by project sponsors, and are not DOT or FTA assumptions. Total may not add due to rounding.

Stability and Reliability of Capital Financing Plan
Rating: Medium-High

The *Medium-High* rating is based on the low FTA share of the project costs, high current bond ratings, future revenue estimates and the good financial condition of the sponsoring agency.

Agency Capital Financial Condition: Sound Transit is a relatively young agency that started transit operations in 1999 with its Regional Express Bus Service and in 2000 with Sounder Commuter Rail. The average age of the bus fleet is only 1.3 years. The agency has received an A1 bond rating from Moody's and an AA bond rating from Standard and Poor's.

Capital Cost Estimate and Contingencies: Sound Transit has submitted an updated cost estimate that is considered reasonable. Contingencies include a project reserve of $128 million, $120 million in construction contingencies, and $100 million in design contingencies. The project budget also includes $605 million in uncommitted bonding capacity that could be made available.

Existing and Committed Funding: All of the local share funding for the Central Link LRT Initial Segment is committed. Local taxes have been collected since 1997, and represent 89 percent of the non-Section 5309 local share. Bond proceeds are anticipated to fund the remaining portion of the local share. The voter approval of Initiative 776 in November 2002 is not anticipated to affect project funding.

New and Proposed Sources: Bond proceeds for the project are considered new, although the agency issued bonds in FY 1999 in the amount of $350 million. The agency has a "non-voted debt limit" of $3.4 billion, and anticipated debt is not expected to exceed $2.4 billion, which is well below that threshold.

Stability and Reliability of Operating Finance Plan
Rating: Medium-High

The *Medium-High* rating reflects a good operating plan. Most of the operating revenues (95.8 percent) are committed and the remainder (4.2 percent) consists of planned Federal formula funds.

Agency Operating Financial Condition: The agency uses a conservatively estimated cash-flow schedule that shows consistent, positive balances throughout the entire plan, including the past five years. The operating and maintenance cash reserves plus general fund balances are sufficient to cover at least three months of operating expenditures from FY 2004 through FY 2008.

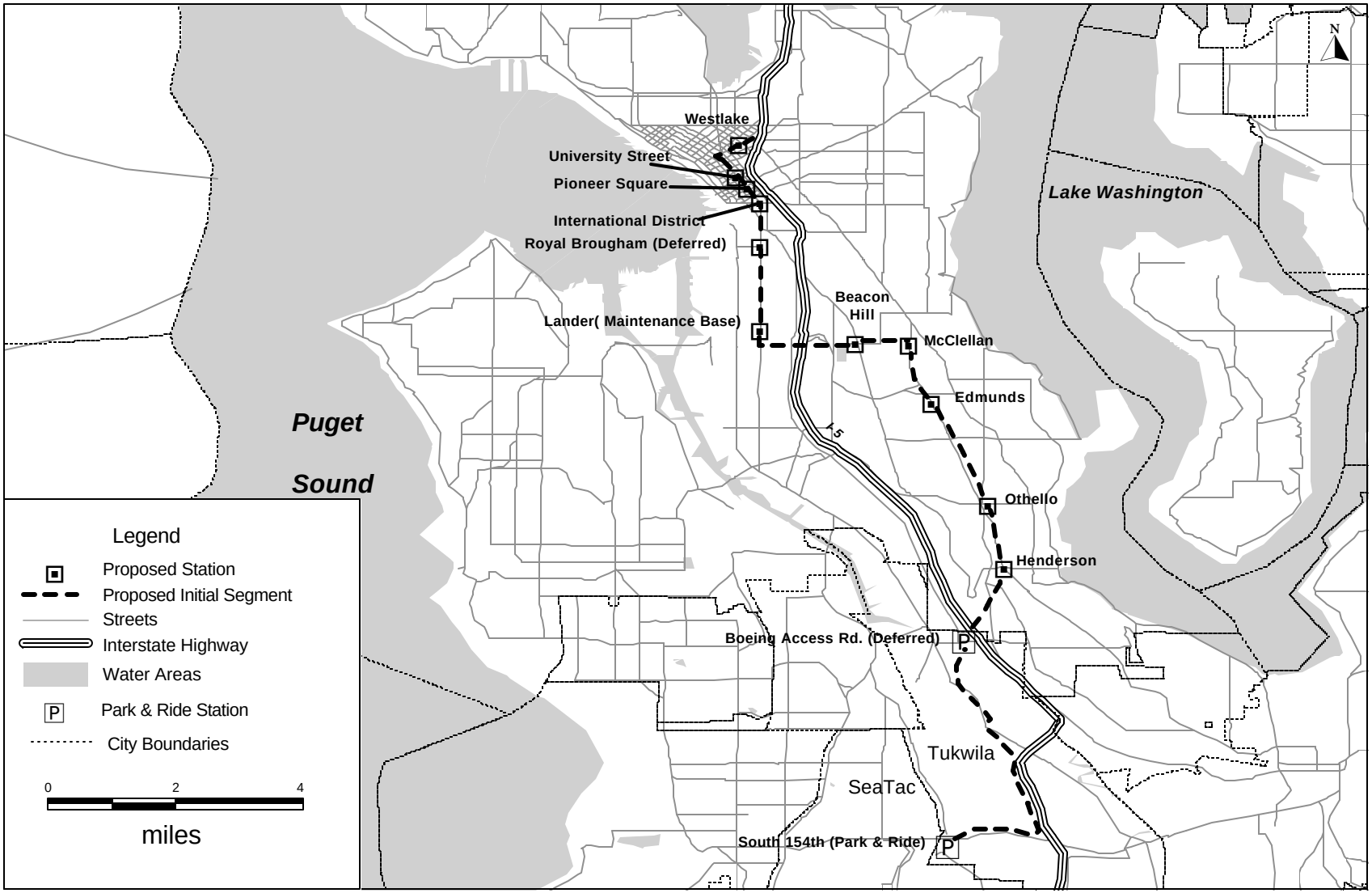
Operating Cost Estimates and Contingencies: The operating cost estimates for the LRT Initial Segment are based on experience from other light rail systems currently operating in the U.S. Tax revenue estimates are conservative relative to historic experience, projected at an annual growth rate well below prior year growth rates. In addition to the required two-month operating and maintenance reserve fund, the agency anticipates cash balances that are sufficient to cover potential shortfalls/cost increases. Sound Transit maintains an operating and maintenance (O&M) reserve fund, equivalent to two months of operating expenditures, to meet potential shortfalls/cost increases. This reserve fund, combined with General Fund balances, provides sufficient funding to cover at least two months of O&M expenditures until 2008, and increasing thereafter through 2021. The O&M plan shows conservative growth of funding revenues relative to historical trends.

Existing and Committed Funding: All of the operating funds are committed. Sound Transit proposed to fund operations with existing system and fare revenues, local tax revenues, interest on General Fund balances, and formula funds. Local taxes have been collected since 1997, and represent a stable revenue source for the agency.

New and Proposed Funding Sources: New sources of funding include Central Link fares. The operating plan anticipates starting collection of formula grant revenues in FY 2007.

Central Link Initial Segment

Seattle, Washington



Federal Transit Administration, 2002